DETERMINATION AND MODIFICATION IN ENGLISH AND TONGA:
A CONTRASTIVE ACCOUNT

BY

HAMBABA JIMAIMA

A DISSERTATION SUBMITTED TO THE UNIVERSITY OF ZAMBIA IN
PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE DEGREE OF
MASTER OF ARTS IN LINGUISTIC SCIENCE

THE UNIVERSITY OF ZAMBIA
2008
DECLARATION

I, Hambaba Jimaima, declare that this dissertation:
(a) represents my own work;
(b) has not previously been submitted for a degree at this or any other University;
and
(c) does not incorporate any published work or material from another dissertation.

Signed: ..................................................
Date: 07. July, 2008
APPROVAL
This dissertation of HAMBABA JIMAIMA is approved as fulfilling in part the requirements of the award of the degree of Master of Arts in Linguistic Science by The University of Zambia.

Signed: ........................................ Date: 04/07/08

Signed: ........................................ Date: 09/07/2020

Signed: ........................................ Date: ........................................
ABSTRACT

This study examined the syntactic processes of determination and modification as they apply to English and Tonga by carrying out a contrastive analysis of the two processes in the two languages. The exercise was undertaken in order to establish whether or not there were any similarities and differences in the formation of the two processes in the two languages. Specifically, the study examined the underlying phrasal categorial features of the determiner phrase; that is, word order, agreement and headness, the Binarity principle within the phrase, the nature of determiners and modifiers as well as how the concepts of definiteness and indefiniteness are realized in Tonga.

The study based its conclusion on the data collected from both primary and secondary sources. Monze and the confines of the University of Zambia were the principle study areas. For primary data, informants, who were bilingual in English and Tonga, were served with a simple phrase list which contained potential phrases in English and Tonga. They were required to provide equivalents in each language.

With regard to data analysis, the study adopted a qualitative approach. Each finding was analysed in accordance with the research objectives. In this connection, the major findings of the study are thus: (i) the structure of the determiner phrase in English is different from that of Tonga in terms of word order; (ii) the nature of determiners and modifiers in Tonga is influenced by the noun class system so that a given determiner/modifier agrees with a given noun not only in number and class, but also in the feature inanimate/animate; (iii) possessives in Tonga especially those that denote consanguinity show instances of incorporation; (iv) Tonga shows an instance of an adherence to the parametric choice between head-first and head-last parameters when it comes to demonstratives. Demonstratives can either be post or pre nominal; and (v) Tonga unlike English does not realize definiteness and indefiniteness by article but rather by the speech context.

As a result of some provoking issues arising from the findings in this study, which unfortunately supersede the scope of the research objectives, the study recommends: the formulation of a syntactic model which should be used to explain grammatical differences that exist between and among languages. Such a model should not only make generalizations about languages, but should also point out within the universal grammar linguistic features that are uniquely identifiable to a particular language. The study further recommends a re-look at the generalization concerning the binary choices that a language is said to make between the Head–first and Head–last parameters. The findings on Tonga have shown that Tonga oscillates between these parameters when it comes to demonstratives.
DEDICATION

To my parents: Mr Frank Handili Jimaima and Mrs Ruth Hara Jimaima.
ACKNOWLEDGEMENTS

It is with difficulty to particularise my indebtedness when almost everyone deserves to be thanked for their indelible contribution to the successful completion of this study. Of these, Professor Vincent Musamba Chanda (PhD) my academic supervisor deserves special mention and appreciation. He not only guided me, but also made his personal library accessible.

Many thanks to Mr Tom Lynn for his academic and insightful contribution leading to a production of a-free-of-grammatical error dissertation. He was in fact the co-academic supervisor.

My heart goes out to Dr John Simwinga for doing the extraordinary: he sacrificed to read through my dissertation and thereby making insightful suggestions at two different stages of the write-up. That he equally allowed me to use his office and computer goes without mention. I can only say he is a man of the people.

I am indebted to my brother, Mr Handili Jimaima and his wife Lungowe, for their ceaseless support from undergraduate to this level. My gratitude also goes to all my family members who ‘halved’ my burdens through prayer. Odia, my wife, is particularly thanked for her encouragements when the morale was waning.

Above everything else, I am grateful to Him (God) who is able to keep me from falling. He endowed me with good health and ingenuity, both of which were indispensable to the completion of the investigation.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declaration</td>
<td></td>
</tr>
<tr>
<td>Copyright</td>
<td></td>
</tr>
<tr>
<td>Approval</td>
<td></td>
</tr>
<tr>
<td>Abstract</td>
<td>iv</td>
</tr>
<tr>
<td>Dedication</td>
<td>v</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>vi</td>
</tr>
</tbody>
</table>

## CHAPTER ONE: INTRODUCTION ...........................................1

1.1 Background ..................................................................1

1.1.2 Linguistic Features Investigated in the study ..................2

1.2 Statement of the Problem ..........................................3

1.3 Rationale ....................................................................4

1.4 Aim and Objectives of the Study ..................................4

1.5 Theoretical and Conceptual Framework .............................5

1.6 Operational Definition ...........................................6

1.6.1 Determination ......................................................6

1.6.2 Modification ......................................................7

1.6.3 Head .................................................................7

1.7 Research Design .....................................................8

1.7.1 Data Collection ..................................................8

1.7.2 Data Collection Instrument ....................................8

1.7.2.1 Introspection ..................................................8

1.7.2.2 Simple Phrase List ..........................................9

1.7.2.3 Desk Research ...............................................10

1.8 Scope of the study ..................................................10

1.9. Structure of the Dissertation ....................................11

1.10 Summary ....................................................................12

## CHAPTER TWO: LITERATURE REVIEW ....................................13

2.1 Determination and Modification in Traditional Grammar ..........13

2.1.1 Determination ......................................................13

2.1.2 Modification ......................................................14

2.2 Determination and Modification in X-bar Syntax ..................14

2.2.1 Determination ......................................................14

2.2.2 Modification in X-bar Syntax ..................................17

2.3 Determination and Modification in Modern Grammar ...............17

2.3.1 Determination ......................................................17

2.3.2 Modification ......................................................20

2.4 Defining Determination and Modification ..........................20

2.4.1 Determination ......................................................20

2.4.2 Modification ......................................................22

2.5 Conclusion ..................................................................23

2.5 Summary ....................................................................24
CHAPTER THREE: FINDINGS

3.1 Determiners ........................................ 25
3.1.2 English ......................................... 25
3.1.2.1 The Article .................................. 25
3.1.2.2 Demonstratives ................................ 25
3.1.2.3 Possessives ..................................... 27
3.1.2.4 Numeral ....................................... 27
3.1.3 Tonga ............................................ 28
3.1.3.1 Articles ........................................ 28
3.1.3.2 Demonstratives ................................ 28
3.1.3.3 Possessives ..................................... 30
3.1.3.4 Numerals ....................................... 31
3.2 Numerals-Unemphatic Numerals ....................... 31
3.3 Emphatic Numerals .................................. 32
3.4 Modification ......................................... 35
3.4.1 English ........................................... 35
3.4.2 Tonga ............................................. 35
3.5 Determination of Coordinate Structures ................. 36
3.5.1 English ........................................... 36
3.5.2 Tonga ............................................. 36
3.6 Definiteness in Tonga ................................ 36
3.7 Conclusion ........................................... 36

CHAPTER FOUR: DISCUSSION

4.1 Headness: why a Determiner Phrase ................. 38
4.1.1 Determination ..................................... 38
4.1.2 Modification ...................................... 39
4.2 Determination by Articles ............................. 40
4.2.1 Determination Article in English Language ... 41
4.2.2 Determination by Article in Tonga ............... 41
4.3 How Determination Affects the Underlying Phrasal Categorial Features of the Determiner phrase: Phrase Configuration 42
4.3.1 Determination and Word Order in English .......... 42
4.3.1.1 Articles (a the) ................................ 42
4.3.2 Determination and Word Order in Tonga .......... 45
4.3.2.1 Demonstratives ................................ 45
4.3.2.2 Determination by Numerals ................. 47
4.3.2.3 Demonstratives and Numerals ............... 48
4.3.2.4 Numeral and Article .......................... 50
4.3.5 Determination by Possessives ...................... 51
4.3.5.1 Determination by Possessives in English ... 51
4.3.5.2 Determination by Possessives in Tonga .... 51
4.3.6 Determination of Coordinate Structures ........... 51
4.3.6.1 English ....................................... 52
4.3.6.2 Tonga ........................................ 52
4.4 Nature of Determiners during Determiner phrase Formation

4.4.1 Affixal Agreement of Determiners in English

4.4.1.1 Definite ‘the’

4.4.1.2 Indefinite ‘a’

4.4.2 Demonstratives (English)

4.4.2.1 Nature and Affixal Agreement of the Demonstrative ‘this’

4.4.2.2 Feature Percolation Principle involving ‘this’

4.4.2.3 The Morphological Implication of the Feature Percolation

4.4.2.4 Affixal Agreement involving the Demonstrative ‘these’

4.4.3 Demonstratives in Tonga

4.4.3.1 Affixal Agreement of the Demonstrative ouy ‘this’

4.4.3.2 Feature Percolation Principle in Tonga Demonstratives

4.4.3.3 The Morphological Implication of the Feature percolation in Tonga

4.4.3.4 Agreement between Determiner and the Unexpressed but understood Subject

4.5 Binarity Principle within the Determiner Phrase

4.6 Vowel Doubling

4.7 Incorporation in Tonga

4.8 Modification

4.8.1 How Modification Affects the Underlying Phrasal Categorial Features of the
determiner phrase: Phrasal Configuration

4.8.1.0 Modification of English

4.8.1.1 Word order

4.8.1.2 Nature and Affixal Agreement of Modifiers in English

4.8.1.4 Headness

4.8.2 Modifiers in Tonga

4.8.2.1 Word order

4.8.2.2 Nature and Affixal Agreement of Modifiers in Tonga

4.9 Definiteness in Tonga

4.10 Summary

CHAPTER FIVE: CONCLUSION AND RECOMMENDATION

5.1 Conclusion

5.1.1 Phrasal Configuration

5.1.2 Feature Percolation

5.1.3 Incorporation

5.1.4.3 Vowel Doubling in Demonstratives in Tonga

5.1.5 Nature of Determiners

5.1.5.1 English

5.1.5.2 Tonga

5.2 Recommendations

5.2.1 Recommendation for further Research

APPENDIX (DATA)

BIBLIOGRAPHY
List of Tables

Chapter Three
Table 1: Unemphatic Numerals in Tonga........................................31
Table 2: Emphatic Numerals in Tonga........................................32
Table 3: Nominal Prefixes in Tonga..........................................33
Table 4: Demonstratives in Tonga (near the speaker)..................33
Table 5: Demonstratives in Tonga (near the spoken to).............34
Table 6: Possessives in Tonga..................................................34
Table 7: Modifiers in Tonga....................................................35

ABBREVIATIONS

CP                          complementiser phrase
D                           determiner
DP                          determiner phrase
N                           noun
NP                          noun phrase
VP                          verb phrase
V                           verb
CHAPTER ONE

INTRODUCTION

1.0 General
This chapter introduces the study by providing background information to the investigation, stating the specific problem under study and pointing out the rationale for the exercise. The chapter also spells out the objectives of the investigation, the theoretical and conceptual framework within which the findings have been analysed and the methodology employed in data collection and analysis. The chapter ends with an outline of the scope of the study and the structure of the dissertation. It has equally provided a summary of the issues dealt with in the Chapter.

1.1 Background

1.1.0 General
This study was partly motivated by the argument that the nominal structure of most languages draws upon the Chomskyan X-bar schema which insists on a structured noun phrase with its predetermined specifier, which entails that a given head noun is a depository of determiners and modifiers (Aarts 1997:97). Because of this belief, it is asserted that a noun phrase consists minimally of a head noun and any number of noun phrase modifiers, which include determiners, quantifiers, demonstratives, possessives, numerals and articles. What was of interest in this study, as Asher (1994) points out, is the fact that traditional grammar draws a line between what can be termed a determiner and what can be termed a demonstrative. Available literature reveals that determiners are subsumed under modifiers. This implies that determination is one of the subsets of modification in traditional grammar.
Further, as reviewed in the Literature, a distinction is made between demonstratives and determiners. In addition, within the class of demonstratives, a distinction is made between a demonstrative pronoun and a demonstrative possessive. On the contrary, however holding traditional grammar might be, it has been observed that today linguists take determination as that category of grammatical units characterized by ones that are seen as limiting the potential reference of a noun phrase. To this category belong articles, demonstratives, possessives, quantifiers and numerals (Mathews, 1997). Modification, on the other hand, has been restricted in most literature to adjective word class within the noun phrase framework. This study adopted the contemporary view, yet limiting the extension of both determination and modification.

Central to this study is the view that in both traditional and contemporary grammar a phrase is considered as a syntactic unit that is not a clause. Hence, in particular, the phrase is the largest unit which has some word, of a specific category, as its head. This definition of a phrase has been welcomed as a technical notion. To that effect, “noun phrases are strings of words whose central element is a noun” (Aart 1997:97). However, this study contends that the central element in these strings of words is a determiner.

1.1.1 Linguistic Features investigated in the Study

This section points out some of the linguistic features that have been investigated in the study. Firstly, the study envisaged grammatical phenomena that go side by side with determination and modification in syntax. Notable among others are phonological and morphological implications of the operation. The morphological implication that did not
escape the researcher’s net was the affixal agreement within the phrasal categorial representation of the determiner phrase in both English and Tonga.

Next was the binarity principle within the universal grammar involving specifier-first and specifier-last parameters. In this connection, one of the insatiable interests of this study was to ascertain the extent to which a language obeys one of the parametric binary choices specified within the universal grammar. Linked to this idea, was another inescapable feature of contrast between English and Tonga, the concept of word order. In linguistics, word order usually refers to the sequence in which grammatical elements such as subject, verb, and object occur in sentences (Crystal 1987). In this study, however, ‘word order’ was strictly used to explain the linear structure of a determiner phrase, and the study constantly uses the term ‘configuration’ to refer to word order.

1.2 Statement of the Problem

Most literature seems to be a replica of the 1970 linguistic era, where Hall observed that “we are now witnessing the forcing of all languages into the mould of English, just as in earlier periods they were forced into that of classical Latin” (Robinson 1975). Moreover, it is a truism that whereas the concepts of determination and modification have been generally discussed and accepted, and that much literature is available on these two concepts, little has been said about determination and modification as they operate contrastively in English and Tonga at the syntactic level. In that light, it is not clear as to how definiteness is expressed in Tonga which, superficially, does not seem to possess articles as are found in English. More so, hardly any space has been given to the discussion, the locus of which is the underlying phrasal categorial features of the
determiner phrase, namely, word order, phrasal headship conflict, affixal agreement and feature percolation. In principle, most generalisations in the universal grammar, especially those that pertain to a noun phrase are beset with a lot of flaws and limitations. Moreover, the definition of both determination and modification is riddled by controversy from traditional grammar to contemporary grammar.

1.3 Rationale

It is hoped that by undertaking such a study, one will contribute to the general theory of grammar as some of the approaches the study used were almost always coined and developed by non-linguistic fields. More so, this investigation would bring to the fore the taken-for-granted (effects) underlying phrasal categorial features of the determiner phrase, that is, phrasal configuration, headness and agreement. A major contribution of this study to modern linguistic theory would be the refinement of a great many sweeping statements within universal grammar concerning the parametric binarity, especially as it applies to Tonga. Tangentially, it is envisaged that the study will equally provide reasons for the non-existence of a semantic word for word translation using data from English and Tonga.

1.4 Aim and Objectives of the study

The aim of the study was to investigate determination and modification as they operate contrastively in English and Tonga, pointing out as well the morphological implications of the operation.

The specific objectives of the study were:
(a) to investigate how determination and modification affect the underlying phrasal categorial features of the determiner phrase, that is, word order, headness, agreement and incorporation,

(b) to investigate the nature of determiners and modifiers during any determiner phrase formation,

(c) to investigate how the concepts of definiteness and indefiniteness are handled in Tonga (and English),

(d) to investigate the binarity principle within the phrase (Determiner Phrase and Noun Phrase).

1.5 Theoretical and Conceptual framework

The concepts of determination and modification were studied under the auspices of the Minimalist Program coupled with the X-bar Theory that specifies that within the universal grammar a language that takes on any specifier before the head word within a phrase, obeys that parameter in totality; it does not oscillate between specifier-first and specifier-last parameters. In the X-bar Theory, both the external and the internal structure of the determiner phrase and the noun phrase are provided. It further argued for the existence of a determiner phrase, a view which appears to offset the popular notion about the noun phrase. It is this view that this study has upheld and popularized.

Minimalism has been used only because of its insistence on the binary choices that languages make between specifier-first and specifier-last parameters. Using data from English and Tonga, the parametric choice has been tested. One other central issue in the investigation of determination and modification concerned headness or what was called
in this study ‘phrasal headship conflict’. This had been provoked following the inclusion of functional categories such as inflection (Infinite Phrase (IP)) and complement phrase (CP) in the X-bar Theory (Chomsky 1986). To stop this possible ‘phrasal headship conflict’, the study employed the feature percolation principle where any noun was [+nominal] abbreviated [+ nom], [-determiner] abbreviated [-det] and any determiner was [+det]; modifier [+mod]. The assumption

\[ [+\text{nom}] [+\text{nom}] \]

being that any determiner carries within itself the features nominal and definiteness. Thus, it is the endocentric head of the noun phrase. This was tested with data from both English and Tonga.

The two theories of Syntax have been chosen on the pretext that they are still able to explain modern linguistic phenomena in a more convincing manner given the current research objectives of this study. This, however, does not imply that other theories of Syntax not used here are inferior. It is only that they are not suited for the current research objectives.

1.6 Operational Definition

The study has made reference to some linguistic concepts which, if left undefined, might be misunderstood and over-applied to areas the study did not intend to stretch into. This section of the report presents and discusses some of the major grammatical concepts investigated in the study.

1.6.1 Determination

In the context of this study, the term ‘determination’ has been used to include determiners as understood in modern linguistics. That is, any of a class of grammatical units
characterised by ones that are seen as limiting the potential referent of a noun phrase. Some of the words which mark determination are a/the, this/these, that/those, my/your, own/ulya, aba/abya. Quirk et al. 1985’s division of determiners into predeterminers, central determiners and post determiners was equally subsumed under the scope of determination.

The concept of determiner has been treated differently by traditional grammarians and modern linguists. Traditional grammarians consider a determiner as a subset of modifiers as in ‘this man’. Modern linguists, on the other hand, draw a line between what can be called a determiner and what can be a modifier. To that effect, only adjectives are looked upon as modifiers. Further, lexicographers provide varied views about determiners. Most dictionaries and encyclopedias restrict the class of determiners to only articles, demonstratives and possessives. Yet others stretch the scope to include, aside from the mentioned, numerals, quantifiers such as ‘some’, ‘all’ and ‘both’. Another class of linguists views determiners to be that class of linguistic items which is exclusively and predominantly limiting the noun they modify. To the list, therefore, they include such elements as ‘many’, ‘much’, ‘little’, ‘few’, and ‘a few’.

As a consequence of different syntactic theories, a determiner is not the same ‘thing’/entity in non-transformational grammars and transformational ones. In X-bar Theory, for example, a determiner is an example of a specifier. In minimalism a determiner has been given an extra status. It is not just a functional category. It is also a lexical category that can function as a head of a phrase. This accounts for the existence of a determiner phrase.

1.6.2 Modification

Modification is a type of syntactic construction in which a head is accompanied by an element typically not required by it. This phenomenon is also called attribution. Thus modifiers in this study are restricted to the adjective class.
1.6.3 Head

The study uses ‘head’ in its wider definition, that is, a phrase ‘P’ has a head ‘h’ if the presence of the head determines the range of syntactic functions that ‘P’ can bear. And, it is this definition that is central to X-bar Theory, the theory which the study draws upon, in part. Thus the study does not assume that in a given noun phrase, a noun is its head. Instead it fosters the 1980’s popular view of functional heads such as determiners.

1.7 Research Design

This section discusses in detail the research design adopted and used during the process of both data collection and data analysis. The research restricted itself to the use of qualitative method during data collection and data analysis. The qualitative approach in this sense focused on the descriptive analysis of Determiner – Noun and Modifier – Noun configuration. Most of the data included at least nominal material and a determiner/modifier element.

1.7.1 Data Collection

To ensure authenticity of the research, both primary and secondary data were collected. Primary data were collected in Monze as the study area, while secondary data were collected from the University of Zambia library.

1.7.2 Data Collection Instrument

The study employed Introspection, simple phrase list and desk research.

1.7.2.1 Introspection

Owing to the fact that the study was purely syntactic and that the researcher knows the two languages involved, introspection was employed as the first instrument for data collection. The rationale being that the researcher was fully aware of the structure of the Determiner Phrase in both English and Tonga.
Here, the researcher engaged himself in semi-vocalisation especially with sentences that had the nominal structures that were pre- or post-determined/modified. As Chomsky (2006) puts it, the native speakers’ intuition cannot be underestimated. Within the framework of the minimalist approach, Radford (1997:24) in support of introspection states that ‘a grammar of a language is a model of the grammatical competence of the fluent native speaker of the language, and that competence is reflected in native speakers’ intuitions about grammaticality and interpretation. Based on this linguistic revelation, and more so on Chomsky’s innateness hypothesis that borders on creativity, the researcher formulated generalizations about how words, phrases and sentences are formed in both English and Tonga.

When studying Tonga, which is the researcher’s mother tongue, one engaged his own self in judging the ambiguity, acceptability and other properties of utterances against one’s own intuitions. To that effect such judgments were to be made; whether demonstratives precede the nominal element in Tonga or not, and the sort of determiners that are found in Tonga. All such judgments were supported by or supported by the researcher’s intuition.

1.7.2.2 Simple Phrase List
A simple phrase list comprising all possible determiners/modifiers and sample phrases in both English and Tonga was administered to five informants in order to collect and ascertain, in a contrastive manner, both the external and internal structure of the determiner phrase in the two languages. The phrase list is contained in Appendix of this report.

The informants were selected on the basis of convenience and are not in any sense a random sample. With a few exceptions, they were University-College-educated and either natives or long-time inhabitants of Southern province. These were believed to be speakers of the standard dialect.

Note, however, that the first interview with a non-linguist informant began with a training period in which the researcher explained to the informant the purpose of the study, the
sort of judgment he/she was supposed to make, and what sort of information could be useful for him to volunteer. This was done solely to non linguists.

Note further that terms like ‘determination’, ‘modification’, ‘phrase’, and ‘configuration’ are reasonably clear to a linguist, but less than meaningful to the new informant. Here, the task was defined. The first step was to show exactly what the study was all about and the type of information they were required to provide. The concepts, in exceptional circumstances, were defined. Thirdly, they were required to translate structures involving a determiner and a noun in English into Tonga and vice versa. At this stage, the informant was given some leeway to provide sentences of their own that contained both determiners and modifiers. In isolated situations, the informants were asked to evaluate the phrase test as a whole. If they accepted the phrase as normal, then by implication, they accepted the construction being tested. If they rejected the phrase, however, the interviewer would ask for the correct construction, by asking such questions as: “How would you phrase it?”, “What seems to be the problem?”, “How would you change the phrase to make it meaningful and acceptable?”

1.7.2.3 Desk Research

The University of Zambia Main Campus Library provided a sound footing for the desk research. The researcher unearthed data related to the structure of the determiner phrase in both English and Tonga. It should be remembered here that ‘corpus data’, that is, books, novels and articles provided in part the evidence especially for the nominal – determiner phrasal categorial structure in English – this showed how renowned writers and novelists handle phrases that are built around the determiner and nouns.

The desk research exercise provided an overview of the implications of X-bar theory and Minimalism on the concepts of determination and modification. This exercise involved carrying out a survey across various linguistic periods. Specific emphasis was placed on what the two concepts (determination and modification) meant to the traditional grammarians, phrase structure grammarians, generative grammarians, and the post generative grammarians. The survey revealed lack of agreement among the grammarians
on the definition of the concepts of determiner and modifier. This lack of agreement has been discussed in Chapter 3: Research findings.

1.8 Scope of the Study
The scope of this study is confined to the contrastive analysis of determination and modification in English and Tonga. The study does not discuss all the determiners in the two languages as it is not a comprehensive study of determination. Only articles, demonstratives, possessives and numerals have been discussed. Neither is the study concerned with what each theory of linguistics states about the phenomena under investigation. The exercise was undertaken with the view to presenting a contrastive account of determination and modification in English and Tonga. To this end, the results of this study need not be interpreted outside the context of the objectives of the investigation. Nor should the conclusion be over extrapolated to all Bantu languages in relation to English. If some areas have not been touched upon, it is because they do not help address the cause for which the investigation was engaged in. Note also that only a few examples have been cited to discuss agreement between determiners and nouns. If each determiner were to be discussed, the report would be unnecessarily long.

1.9 Structure of the Dissertation
This dissertation consists of five chapters. The first Chapter introduces the study by providing background information to the investigation, stating the specific problem under study and pointing out the rationale for the exercise. The Chapter also spells out the objectives of the investigation, the theoretical and conceptual framework within which of the findings were analysed and the methodology employed in data collection and analysis. The Chapter ends with an outline of the scope of the study.

The second Chapter deals with literature review wherein previous investigations related to the present study are presented. The chapter is divided into three sections: traditional grammar X-bar theory and modern grammar. The first presents an overview of determination and modification in traditional grammar in relation to the objectives of the study. The Chapter then considers determination and modification in X-bar syntax. It is
in this Chapter that modern grammar’s viewpoint about determination and modification has been presented.

The third Chapter of the dissertation presents the findings of the investigation without any attempt to discuss them. The presentation is arranged in accordance with the research objectives, acting as sub-themes of the dissertation.

The fourth Chapter discusses the findings on determination and modification in a contrastive manner. The findings pertaining to each aspect of the two concepts under investigation: determination and modification are discussed in the light of the research objectives and the theoretical framework. Under determination, the findings discussed relate to such determiners as: articles, demonstratives, numerals and possessives. Under modification, the findings discussed relate to word order and agreement. The chapter also discusses ‘definiteness’ and ‘incorporation’ in Tonga and closes with recommendations with regard to the implication of the current research findings on possible future studies.

1.10 Summary
This Chapter has introduced the study by presenting background information, stating the problem under investigation, providing the rationale for the investigation and prescribing the theoretical and conceptual framework. The Chapter has outlined the objectives, the methodology and the scope of the study as well as the structure of the dissertation.

The subsequent chapter deals with the literature review, focusing on relevant information on the subject.
CHAPTER TWO
LITERATURE REVIEW

2.0 General

The preceding Chapter introduced the study by providing background information to the investigation, stating the specific problem under study and pointing out the rationale for the exercise. The Chapter also spelt out the objectives of the investigation, the theoretical and conceptual framework within which the analysis of the findings has been handled, and the methodology employed in data collection and analysis. The Chapter ended with an outline of the scope of the study and the structure of the dissertation.

The present Chapter reviews the literature which has a direct bearing on the present study. The review has been sub-divided into three sections: Tradition grammar, X-bar theory and modern grammar to ensure clarity and logical presentation. The concepts of determination and modification are defined and exemplified in each of the three sections. The Chapter concludes with an outline of some of the ‘grey areas’ noticed in the literature reviewed.

The literature reviews the concepts of determination and modification in a theoretical context as there is little written on the contrastive account of the two concepts in English and Tonga.

2.1 Determination and Modification in Traditional Grammar

2.1.1 Determination

In traditional grammar, the concept of determination is restricted to the word class articles (the/a) while demonstratives were classed as independent operators for possession or pronominal (Asher 1994). This means that traditional grammarians were preoccupied with the concepts of definiteness and indefiniteness whenever articles were considered.
2.1.2 Modification

Modification, on the other hand, seems to have been used 'hyponymically' under which determiners, demonstratives, numerals and qualifiers were subsumed. Any word class which could be used to modify a noun morphologically, syntactically or semantically was classified as a modifier. As shown in section 2.4, the concept of modification is an elusive one. Such examples illustrate this phenomenon:

1. a beautiful girl
2. my mother
3. that man
4. five men

2.2 Determination and Modification in X-bar Syntax

2.2.1 Determination

In this section of the dissertation, the emphasis is placed on the structure of the determiner phrase and an apologia for the existence of the determiner phrase. Note that the concept of determination is replaced with the concept of specifier. Articles, demonstratives, numerals and possessives are looked upon as specifiers in X-bar Theory.

One therefore presents firstly the notion of the noun phrase. In terms of the structure of Noun Phrase, two models seem to have greatly influenced treatment of this phenomenon. The first suggested structure has been tailored by the X-bar Theory. Here, it has been argued that the nominal structure of all languages draws upon the Chomskyan X-bar schema which insists on a structured noun phrase with its predetermined specifier, that is, a given head noun is a depository of determiners and modifiers (Crystal, 1971:215). This explains why Asher (1994:2848) states that, traditionally, the term Noun Phrase has been
used to describe any phrase consisting of a noun as its central constituent (or head) and capable of functioning as an argument in a sentence. For example,

5. the man is walking.

In which the man is a noun phrase in which man is the central constituent (or head) and the is the determiner. The proponents of the noun phrase hold that noun phrases are thought of as consisting minimally of a head noun, together with any number of noun phrase modifiers, and these include determiners, quantifiers, demonstratives, possessives, numerals and articles.

The belief here is that nouns naturally attract determiners/modifiers to themselves and not the other way round. Regrettably, this notion, one would argue, has not only eroded the status quo of functional words like determiners, but has also led to the belief that a given noun plus a given determiner equals a noun phrase.

While some linguists maintain that noun phrases are headed by nouns, others maintain that the head of a noun phrase should in fact be the determiner: for instance, the definite article ‘the’ in ‘the man is walking’ is the head word giving rise to the determiner phrase. Asher (1994: 2848) points out that “according to these theorists, NPs should really be called determiner phrases”.

Commenting on headness within a phrase, Belletti and Rizzi (1996:239) attest to the syntactic status of the determiner. In this respect, the argument is that, following the extension of the X-bar theory to functional categories, INFLECTION (IP) and COMPLEMENT (CP) Chomsky (1986 b), argues that the determiner should likewise be
accorded the same status. Obviously, this issue has become a focus of intensive inquiry.

The argument goes further, assuming that the determiner projects its own maximal projection (DP) as other functional categories do. Linguists have been concerned with the question of what the syntactic relation is between Noun Phrase and Determiner Phrase. To that effect, there are the two logical possibilities that emerge: (Belletti and Rizzi, 1996)

(i) The Noun Phrase is the maximal projection of N (namely NP), the Determiner Phrase being generated inside the NP, as a sister of N

(ii) The NP is the maximal projection of D (DP), which takes NP as its complement. Note how the two views are diagrammatically represented. Figure (i) is a diagrammatic presentation of a noun phrase while figure (ii) is a diagrammatic presentation of determiner phrase.

![Diagram](image)

It has been argued in Belletti and Rizzi that (i) above champions the thought of Traditional Grammar with regard to the structure of Noun Phrases. On the contrary, within the contemporary theory of grammar, most linguists seem to be in favour of the
(ii) structure. Thus X-bar Theory exposes the views of both traditional and modern grammars. The support of which stems from the presence of IP and CP; thus claiming that DP should head the NP in the same way that CP heads the clause. This is to be found also in the fact that structural representations are now seen as arising from the integration of lexical projections into a configurational skeleton provided by a functional head, (that is, determiner) and its projection (DP). Bulletti and Rizzi further point out that lexical heads provide the descriptive content and the basic argument (thematic) structure; functional heads determine the configurationally geometry and provide structure grammatical specifications such as tense, mood and definiteness; thus contributing to the determinations of the interpretation as well as of the form of linguistic expressions. (Siloni, 1996:240)

2.2.2 Modification in X-bar Theory

In the X-bar theory, modification is reduced to the class adjective within the framework of the noun phrase. Modifiers, unlike determiners, do not occupy the specifier position; they are purely a free syntactic category that modifies nouns. On phrasal configuration, Bery (1998:161) points out that, languages tend to be very rigid about the position of adjectives relative to nouns. Adjectives are either preposed or postposed, with free variation being very uncommon. When there is variation, it usually involves semantic/stylistic differences.
2.3 Determination and Modification in Modern Grammar

2.3.1 Determination

Based on their syntactic function, articles, demonstratives, numerals and possessives have been collapsed into a general model of determination in modern grammar. This reveals a departure from the traditional view to the latest one. Thus, what can be considered a determiner depends largely on which grammar one is using to advance his/her theory.

With regard to what has been accepted as determiners in the modern theory of grammar, with special reference to English Language, Randolph Quirk et al (1985:246) state that, ‘we distinguish three classes of determiners’.

(i) Predeterminers, for example, half, all, double etc
(ii) central determiners, for example, articles \(\rightarrow\) the, a/an
(iii) postdeterminers, for example, cardinal and ordinal numerals for example, three, many, few.

What is intriguing is the fact that the three classes of determiners identified by Quirk et al have been set up on the basis of their position in the DP in relation to each other. Added to this thought is the argument that different noun classes require different articles (determiners). How this classification could work with Tonga data remains a mystery. Mathews (1997: 25) defines an article as a determiner whose basic role is to mark noun phrases as definite or indefinite; for example, the definite the in the girl, indefinite a in a girl. A further comment on articles concerns their distinguishability from other determiners. Two reasons are put forward in this regard; that they cannot form phrases on their own. Also the distinction they make is obligatory. Mathews demonstrates this fact by exemplifying an instance where the is deleted as in ‘I am looking for the girls’;
the object girls is then specifically indefinite, like the singular a girl in ‘I am looking for a
girl’, and does not merely cease to be specifically definite.

Interestingly, today, it has been revealed that most literature restricts modification to the
adjective word class. The Oxford Dictionary of Linguistic (1997:95), for example, states
that adjectives are predominantly modifiers. In spite of this restriction of the use of
modification, here the concept does not exclude, in its scope, adverbs that modify verbs
or adjectives, or indeed adverbs themselves (Quirk et al 1985:245). However, as plainly
stated in the first few lines of the Introduction, the concept of modification in this study
has been limited to the adjective word class, since the study provides a comprehensive
analysis of the determiner phrase.

Turning to demonstratives, Tanz, (2002:219) states that

when language is spoken, it occurs in a specific location, at a specific
time, produced by a specific person and is (usually) addressed to some
specific other person or persons. Only written language can ever be free
of this kind of anchoring in the extralinguistic situation....All natural,
spoken languages have devices that link the utterance with its spatio-
temporal and personal context.

What Tanz seems to be saying is that languages pick out referents by the use of such
words as demonstratives. In English, at least four kinds are identifiable. These are,
‘this’, ‘that’, ‘these’, ‘those’. Demonstratives are looked upon as examples of
determiners. To that effect, they are said to be words that function syntactically as
articles but are semantically deictic because context is needed to determine the referent of
the noun phrase in which they occur. Mathews (1997:91) defines a demonstrative as ‘a
word whose basic role is to locate a referent in relation to a speaker, an addressee, or
some other person, ...referred to: proximal ‘this’ (physically and hence subjectively
closer to the speaker) and distal ‘that’ (physically or subjectively more remote from the speaker).

2.3.2 Modification
Modification in modern grammar is restricted to the adjective word class within the framework of the noun phrase. When discussing modification, Mathews (1997) states that modifiers are syntactic elements that accompany a head even though they are typically not required by it. He points out that nouns, for example, do not in general require an accompanying adjective. Quirk et al (1985) strengthen the argument by stressing that a modifier is largely optional. Semantically, modifiers add descriptive information to the head, often restricting the reference of the head. Note that different scholars provide varied views concerning what can be an adjective. Bright (1992: 2850), for example, argues that the class of adjectives in English includes ordinal numerals such as first and second, related adjectives such as next and last, adjectives such as same and other, and arguably the whole class of quantifiers (for example, many, (a) few, several, much and little) which are a closed class of quantifiers. The open-class quantifiers include, for example, plenty of, a lot of, great, good, large and small).

Radford (1997) in defining adjectives states that it is a category of word which often denotes states (for example, happy, sad), which typically has an adverb counterpart in “ly” (cf, sad/sadly), which typically has comparative/superlative forms in “+ er /” “+est” (cf adder/saddest), which can often take the prefix “+un” (cf, unhappy), and which can often form a noun by the addition of “+ness” (cf. sadness). Thus modification in modern grammar presupposes a class which is syntactically optional in both English and Tonga.

2.4 Defining Determination and Modification
Here, one attempts to show the ambiguity that surrounds the two linguistic concepts of determination and modification. The justification for such an attempt stems from the varied and different definitions of the two concepts as used by both lexicographers and linguists. Below are some of the definitions noted.
2.4.1 Determination
(a) Determiners form a closed class of functional words which have the general property of not themselves permitting modification. The class of determiners includes articles (a, the), personal determiners (we, you), demonstratives (this, that), interrogative determiners (what, which), exclamatory determiners (what, as in ‘what a fool’), and quality determiners (such, as in ‘such a fool’) (Asher, vol 5).

(b) Determination is restricted to the article word class, (Kaplan R, 2002).

(c) A word level category which includes among others the articles (a, the) and the demonstratives (this, that), (Borseley 1999).

(d) Syntactically, determiners are operators that combine with nouns to form noun phrases. Semantically, determiners are functions that combine with noun denotations to form noun phrase denotations. Articles, quantifiers and numerals are the best examples. (Asher, vol 2).

(e) The term determiner covers a closed class of grammatical items in the nominal groups or noun phrase, including articles and demonstratives (the, a, this, that) which determines or specifies the reference of the noun. Modifiers expressing quantity (some, much and every), and the possessives (my, your, their) are also classed as determiners. (Wales, 1989).

(f) Unlike adjectival modifiers, determiners in the narrower sense are mutually exclusive, that is, they cannot co-occur with each other (Wales 1989).

(g) Determiners (the, a) characteristically function as modifiers (the elephant), and so do adjectives (the old grey African elephant) ibid.

(h) A class of words that occur before the noun as specifiers in noun phrase structure, for example, the, this, that, those : (Aarts 1997).
(i) A word that limits the meaning of a noun and comes before a descriptive adjective modifying the same noun (for example, his in ‘his new car’) (Longman Concise English Dictionary).

(j) A word (such as a, the, many) that modifies a noun (The MiniOxford School Dictionary).

2.4.2 Modification

(a) Typical noun phrase modifiers are determiners, quantifiers and quantifier phrases, adjectives, and adjective phrases (Asher vol 5).

(b) Used in modern grammar to describe the dependent elements in a noun phrase and nominal group, occurring before or after the noun as head (Wales 1989).

(c) A word or word group that modifies another (Longman Concise English Dictionary).

(d) Type of syntactic construction in which a head is accompanied by an element typically not required by it. The accompanying element is a modifier (for example, white in ‘white chocolate’) (Matthew 1997).

From the foregoing, it is clear that linguists do not agree on what determination and modification are. A closer look reveals that there is an overlap in the definitions of the two concepts. Secondly, dictionaries do not seem to account for modifiers – any such an attempt shows a mix up of both determiners and adjectives (modifiers) in the same definition. Thus, a determiner is not looked upon in the same way by different scholars. Traditional grammarians, for example, take a determiner as a subset of modifiers. Modern linguists have, on the other hand, drawn a line between what can be called a determiner and what can be a modifier. Most linguists restrict the class of determiners to only articles and demonstratives. Yet others stretch the scope to include aside from the
mentioned numerals, quantifiers and possessives. Another class of linguists sees determiners to be that class which is exclusively and predominately limiting the noun they modify. To the list they include such elements as many, much, little and few.

2.5 Conclusion

Thus from the literature reviewed, the following grey areas were noticed. The concepts of determination and modification, from the literature examined, have not been studied with equal treatment. The two concepts have been discussed only as they relate to the English language and in passing by linguists considering definiteness and indefiniteness from the point of view of pragmatics (reference). Thus the concepts have not been accorded the treatment they deserve especially in the contemporary theory of grammar. Further, to date no attempt has been made, in a comprehensive manner, to provide, on a large scale, a contrastive analysis of the two concepts in English and Tonga. Stemming from this discovery, therefore, much literature on the subject has been extracted from studies that only tangentially touch upon the concepts; studies that deal with similar concepts like central quantifiers and specification (specifiers) in general. The first one being that linguists are still discussing phrasal headship, hereafter called phrasal headship conflict. It was necessary therefore by devising a feature percolation model (principle) within the framework of the NP to ascertain what heads the phrase (NP/DP). Linked to this conflict is the lack of one agreed-upon definition of determination, on the one hand and modification on the other.

The second inconsistency is to be found in Quirk et al 1985 classification of determiners into three classes, namely, predeterminers, central determiners and post-determiners. The
question that arose from this division was whether the same principle could apply to Tonga. This was studied in the light of phrasal configuration.

Thirdly, the literature ignored, or perhaps inadvertently sidelined, the phonological and morphological implications resulting from any syntactic operation during affixation within the phrasal category. Central to this, is the affixal agreement and stress or tone shift in morphology and phonology.

2.5 Summary

This Chapter has presented the popular views of determination and modification according to traditional grammar, X-bar Syntax and modern grammar. It has been observed that the two concepts under investigation are not treated in the same way by the three grammars. The Chapter bemoaned a lack of comprehensive data on the subject as most of the data referred to only tangentially touch upon Determination and Modification as they operate contrastively in English and Tonga.

The next Chapter presents the findings of the research without any attempt to analyse them. They are arranged in accordance with the research objectives.
CHAPTER THREE
FINDINGS

3.0 General
In the previous Chapter, relevant literature was discussed with special reference to
traditional grammar, X-bar Syntax and modern grammar. The Chapter pointed out some
of the grey areas in the literature. The Chapter ended with a summary of what has been
achieved.

This chapter sets forth the research findings without any attempt to analyse them as the
analysis is done in Chapter Four. The findings are presented in form of categories and
subcategories of determination and modification. The section starts by presenting
determination under the theme entitled ‘determiners’.

3.1 Determiners
Here one presents all syntactic elements that were considered as determiners, namely,
articles, demonstratives, possessives and numerals.

3.1.2 English
3.1.2.1 The Article
Three types of the article were identified. These are the definite article ‘the’, the
indefinite article ‘a’ and the zero article ‘ø’. Examples of sentences are given below of
each type.

6. The definite article: The man in slacks.
7. The indefinite article: A man in slacks.
8. The zero article: ø Women like dolls
   ø Women need a safe world

3.1.2.2 Demonstratives
Two types of demonstrative were identified: those that denote “near the speaker” and
those that mean ‘away from the speaker” (‘this’, ‘these’ and ‘that’, ‘those’, respectively.)
The following phrases/sentences show demonstratives in use.
Near the speaker
9. This man was there at the crime scene.
10. These men were there at the crime scene.

Away from the speaker
11. That man was there at the crime scene.
12. Those men were there at the crime scene.

Only one feature of concern is associated with demonstratives in English; that is, the grammatical feature number. It was observed that the feature number of a given demonstrative percolates to the noun it modifies thus affecting the morphological shape of the noun. More so, demonstratives in English are blind to the concept animate/inanimate. Word order involving a demonstrative and a noun is rigid in English. The data revealed that demonstratives always precede the noun.

Example: This man
These men
These trees
That woman
Those houses

Demonstratives and Numerals
When confronted with data involving both demonstratives and numerals, demonstratives preceded both numeral and noun:

Those five houses
These two boys

Demonstratives and Modifiers
Where demonstratives and modifiers (adjectives) were used together the structure was as follows:

Those beautiful houses
That tall man
This short boy

Demonstratives, Numerals and Modifiers

Structures involving demonstratives, numerals and adjectives manifested themselves thus:

These five beautiful houses

3.1.2.3 Possessives

The study noted four example types of the possessive, namely, ‘my’, ‘your’, ‘our’ and ‘their’. In terms of word order within the phrase, possessives always precede the noun. It was observed that possessives in English are non-selective. For example, the plural ‘our’ could be used with a singular noun ‘tree’: ‘Our tree has been cut’. Thus there is no strict agreement in both number and animate/inanimate between the possessive and the noun. Note the following examples:

1. ‘My tree has been cut down’
2. My trees have been cut down.
3. Our tree has been cut down.
4. Our trees have been cut down.
5. Their daughter has died.
6. Their daughters have died.

One notes here that the nature/form of the possessive is not affected by the alteration made to the noun it modifies.

3.1.2.4 Numerals

Here the presentation of the five central numerals has been done, namely, one, two, three, four and five. Two points are associated with numerals in English, and these are their linear ordering and the feature agreement. In terms of their linear ordering they always precede the noun they modify, for example, ‘four men were killed’.

With regard to the feature agreement, numerals are not blind to the grammatical feature number. For example, while it is correct to write
five houses were on fire
it is incorrect to write *five house were on fire.

3.1.3 Tonga
3.1.3.1 Articles

As Good (1953) put it, there is nothing in Tonga that can strictly be said to correspond to the English definite and indefinite articles. It was observed that context instead plays a vital role in establishing definiteness or indefiniteness. It was noted that musimbi ‘girl’ may denote girl, a girl, or the girl, and this can be interpreted based on the context.

3.1.3.2 Demonstratives

Four kinds of demonstrative were noted: (1) proximate to the speaker; (2) proximate and enveloping the speaker; (3) proximate to the person spoken to; and (4) remote from both speaker and person spoken to. Consider the following examples for each type. The study narrowed its scope to only two types, that is, proximate to the speaker and proximate to the person spoken to for a systematic contrastive account.

Proximate to the speaker

1. Oyu muntu ulalya. ‘this person eats’ (is a glutton)
2. Muntu ooyu ulalya. ‘This person is a glutton’ (emphatic/referential)
3. Bana aaba bakali kuzwa mumbazu zyobile. ‘These children were coming from two different directions.’

Proximate to the person spoken to

1. Oyo muntu ulalya. ‘That person eats a lot.’
2. Abo bantu balalya. ‘Those people eat a lot.’
3. Oto twana tulakatazya. ‘Those (small) children are difficult.’

Proximate and enveloping the speaker

Collins (1962) argues that this type is easy simply because it is formed by adding the suffix –no to the verbal prefix. Emphasis can be realized by reduplication of the prefix.

Examples
Tali kokuno ‘he is not here’ (where I am)
Tako kuno ‘he is not here’ (where I am)
Kobika waano ‘put it here’ (where I am)
Uli momuno ‘he is in here’ (where I am)

Remote from both speaker and person spoken to
The referent is considered as somewhat removed from both the speaker and person spoken to. Of course, as Collins (1962) puts it remote here means not more than a few yards, but the referent is thought of as not near or in the direction of either speaker or addressee.

Examples
Joni nkwali kuya ‘John is over there’
Joni uli kokuya ‘John is over there’
Koya kuli vuvullya muntu ‘go to that man over there’

It was noted that demonstratives in Tonga agree not only in number with the noun but also with the class of the noun. It was also observed that demonstratives are sensitive to the inanimate and animate nature of nouns.

In terms of word order, demonstratives in Tonga assume two syntactically and semantically independent positions: that is, before a noun and after a noun.

Example: before the noun
Oyu muntu mubotu. ‘This person is beautiful.’
Aba bantu babotu. ‘These people are beautiful.’

After the noun
Muntu oyu mubotu
Bantu aaba babotu

When confronted with data involving both demonstratives and numerals proper, two things were observed:
(i) It is possible to have both the demonstrative and the numeral following a noun as in:

Manda aaya osanwe, laterally translates as, ‘Houses these five.’

(ii) A demonstrative preceding the noun while the numeral follows the noun as in:

Aya manda osanwe laterally translates as, ‘These houses five’

3.1.3.3 Possessives

The study here revealed the morphological nature of the possessive in Tonga. The following roots were taken note of:

1. –ngu ‘my’
2. –ko ‘your’
3. –kwe ‘his’
4. –isu ‘our’
5. –inu ‘your’
6. –bi ‘their’

The following were the example structures with their English gloss.

1. Muntu wangu ‘My man/person/nephew’
2. Cisi cangu ‘My country’
3. Cisi cesu ‘Our country’
4. Cisi {canu, cenu}{ca-inu} ‘Your country’
5. Bataata ‘My father’
6. Musimbi wangu ‘My girl friend’
7. Mucizi (wangu) ‘My sister’
8. Mwenzuma ‘My friend’
9. Bamaama ‘My mother’
10. Mukwesu ‘My brother’

Note: Wangu (for humans) and cangu (for non humans) are the possessive markers, the equivalent of the English ‘my’.

One striking feature about possessives in Tonga is the loss of the possessive in such examples as Bataata ‘my father’. People do not say ‘Bataata bangu’ or ‘Bamaama
bangu’ ‘my mother’. No doubt, this is as an instance of incorporation within the
determiner phrase; a phenomenon which is alien to the possessives in English. Another
point of contrast has to do with the agreement principle between the possessive element
and the nominal structure. That is the use of wangu only with nouns of classes 1 and 3
and cangu only with non humans and exceptionally with nouns of class 7, which is for
pejorative prefixes.

Examples: Mubwa wangu (class 3) ‘My dog’
Musamu wangu (class 3) ‘My medicine’
Cisimbi cangu (class 7) ‘My girlfriend’ (ugly/big)
Muntu wangu (class 1) ‘My person’

3.1.3.4 Numerals
Here one adopts Collins’ presentation of unemphatic and emphatic numerals. Chanda
(2007) points out that the Bantu counting system is a decimal system. And this manifests
itself in cardinal and ordinal numbers. Note also that as with in other Bantu languages,
the numeral system of Tonga is a complex one. This is partly due to its adherence to the
morphosyntax of the language. As is shown in the Table below, the study restricts itself
to cardinal numbers from 1 to 5, which agree in class with the headnoun. See the Tables
below.

3.2 Numerals (Collins’ Presentation). Unemphatic Numerals (1)

<table>
<thead>
<tr>
<th>sing</th>
<th>one</th>
<th>pl. two</th>
<th>three</th>
<th>four</th>
<th>five</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>muntu</td>
<td>omwe</td>
<td>ba-bobile</td>
<td>botatwe</td>
<td>bone</td>
</tr>
<tr>
<td>2</td>
<td>musamu</td>
<td>omwe</td>
<td>mi-yobile</td>
<td>yotatwe</td>
<td>yone</td>
</tr>
<tr>
<td>3</td>
<td>ikumbi</td>
<td>lyomwe</td>
<td>ma-obile</td>
<td>otatwe</td>
<td>one</td>
</tr>
<tr>
<td>4</td>
<td>bulo</td>
<td>bomwe</td>
<td>ma-obile</td>
<td>ptatwe</td>
<td>one</td>
</tr>
<tr>
<td>5</td>
<td>kuboko</td>
<td>komwe</td>
<td>ma-obile</td>
<td>otatwe</td>
<td>one</td>
</tr>
<tr>
<td>6</td>
<td>kasimbi</td>
<td>komwe</td>
<td>tu-tobile</td>
<td>totatwe</td>
<td>tone</td>
</tr>
<tr>
<td>7</td>
<td>cintu</td>
<td>comwe</td>
<td>zi-zyobile</td>
<td>zyotatwe</td>
<td>zyone</td>
</tr>
<tr>
<td>8</td>
<td>ingombe</td>
<td>yomwe</td>
<td>in-zyobile</td>
<td>zyatatwe</td>
<td>zyone</td>
</tr>
<tr>
<td>9</td>
<td>lugwalo</td>
<td>lomwe</td>
<td>ma-obile</td>
<td>otatwe</td>
<td>one</td>
</tr>
</tbody>
</table>

From the table above, the following can be stated:
1. that numerals agree with the noun in question both in number and class; that is, numeral:

Omwe ‘one’ agrees with nouns of classes 1 and 3 in their singular form
Lyomwe agrees with nouns of class 5
Bomwe agrees with nouns of class 14, for example, bulo bomwe
Komwe agrees with nouns of classes 12 and 15
Comwe agrees with nouns of class 7
Yomwe agrees with nouns of class 9
Lomwe agrees with nouns of class 11

3.3 Emphatic Numerals (2)

<table>
<thead>
<tr>
<th></th>
<th>sing</th>
<th>one</th>
<th>pl.</th>
<th>pl. two</th>
<th>three</th>
<th>four</th>
<th>five</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>muntu</td>
<td>umwi</td>
<td>b-</td>
<td>babili</td>
<td>batatu</td>
<td>bane</td>
<td>bosanwe</td>
</tr>
<tr>
<td>2</td>
<td>musamu</td>
<td>umwi</td>
<td>mi-</td>
<td>abiti</td>
<td>itatu</td>
<td>ine</td>
<td>yosanwe</td>
</tr>
<tr>
<td>3</td>
<td>ikumbi</td>
<td>limwi</td>
<td>ma-</td>
<td>abili</td>
<td>atatu</td>
<td>ane</td>
<td>asanu</td>
</tr>
<tr>
<td>4</td>
<td>bulo</td>
<td>bumwi</td>
<td>ma-</td>
<td>abili</td>
<td>atatu</td>
<td>ane</td>
<td>asanu</td>
</tr>
<tr>
<td>5</td>
<td>kiboko</td>
<td>kumwi</td>
<td>ma-</td>
<td>abili</td>
<td>atatu</td>
<td>ane</td>
<td>asanu</td>
</tr>
<tr>
<td>6</td>
<td>kasimbi</td>
<td>kamwi</td>
<td>tu-</td>
<td>tubili</td>
<td>tutatu</td>
<td>tune</td>
<td>tusanu</td>
</tr>
<tr>
<td>7</td>
<td>cintu</td>
<td>cimwi</td>
<td>zi-</td>
<td>zibili</td>
<td>zyotawe</td>
<td>zine</td>
<td>zisanu</td>
</tr>
<tr>
<td>8</td>
<td>ingombe</td>
<td>imwi</td>
<td>in-</td>
<td>zibili</td>
<td>zitatu</td>
<td>zine</td>
<td>zisanu</td>
</tr>
<tr>
<td>9</td>
<td>ingwalo</td>
<td>lumwi</td>
<td>ma-</td>
<td>abili</td>
<td>atatu</td>
<td>ane</td>
<td>asane</td>
</tr>
</tbody>
</table>


Table showing nominal prefixes in Tonga (3)

<table>
<thead>
<tr>
<th>class</th>
<th>prefix</th>
<th>example</th>
<th>English gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>mu</td>
<td>muntu</td>
<td>‘person’</td>
</tr>
<tr>
<td>2.</td>
<td>ba</td>
<td>bantu</td>
<td>‘persons’</td>
</tr>
<tr>
<td>3.</td>
<td>mu</td>
<td>mubanga</td>
<td>‘a mubanga tree’</td>
</tr>
<tr>
<td>4.</td>
<td>mi</td>
<td>mubanga</td>
<td>‘mubanga trees’</td>
</tr>
<tr>
<td>5.</td>
<td>li</td>
<td>linyo</td>
<td>‘tooth’</td>
</tr>
<tr>
<td>6.</td>
<td>ma</td>
<td>mano / menyo</td>
<td>‘teeth’</td>
</tr>
<tr>
<td>7.</td>
<td>ci</td>
<td>cisote</td>
<td>‘hat’</td>
</tr>
<tr>
<td>8.</td>
<td>zyi</td>
<td>zyisote</td>
<td>‘hats’</td>
</tr>
<tr>
<td>9.</td>
<td>n</td>
<td>nkkuku</td>
<td>‘chicken’</td>
</tr>
<tr>
<td>10.</td>
<td>n</td>
<td>nkkuku</td>
<td>‘chickens’</td>
</tr>
<tr>
<td>11.</td>
<td>lu</td>
<td>luba</td>
<td>‘kraal’</td>
</tr>
<tr>
<td>12.</td>
<td>ka</td>
<td>kakkuku</td>
<td>‘small chicken’</td>
</tr>
<tr>
<td>13.</td>
<td>tu</td>
<td>takkuku</td>
<td>‘small chicks’</td>
</tr>
<tr>
<td>14.</td>
<td>bu</td>
<td>bufwi</td>
<td>‘jealous’</td>
</tr>
<tr>
<td>15.</td>
<td>ku</td>
<td>kubeleke</td>
<td>‘to work’</td>
</tr>
<tr>
<td>16.</td>
<td>a</td>
<td>aciluli</td>
<td>‘on the roof’</td>
</tr>
<tr>
<td>17.</td>
<td>ku</td>
<td>kununzi</td>
<td>‘to the village’</td>
</tr>
<tr>
<td>18.</td>
<td>mu</td>
<td>munganda</td>
<td>‘in the house’</td>
</tr>
</tbody>
</table>

Table showing demonstrative (this near speaker) (4)

<table>
<thead>
<tr>
<th>class</th>
<th>prefix</th>
<th>example</th>
<th>English gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>u</td>
<td>o_yu oyu muntu</td>
<td>‘this person’</td>
</tr>
<tr>
<td>2.</td>
<td>ba</td>
<td>a_abu bantu</td>
<td>‘these persons’</td>
</tr>
<tr>
<td>3.</td>
<td>u</td>
<td>a_y_u ooyu mubanga</td>
<td>‘this mubanga trees’</td>
</tr>
<tr>
<td>4.</td>
<td>i</td>
<td>e_y_i eyii linyo</td>
<td>‘this tooth’</td>
</tr>
<tr>
<td>5.</td>
<td>li</td>
<td>e_li eyii linyo</td>
<td>‘this teeth’</td>
</tr>
<tr>
<td>6.</td>
<td>a</td>
<td>a_aaya mano</td>
<td>‘these teeth’</td>
</tr>
<tr>
<td>7.</td>
<td>ci</td>
<td>e-ci eeci cisote</td>
<td>‘this hat’</td>
</tr>
<tr>
<td>8.</td>
<td>zi</td>
<td>e-zi eyzi zyisote</td>
<td>‘these hats’</td>
</tr>
<tr>
<td>9.</td>
<td>i</td>
<td>e-y-i eyyi nkuku</td>
<td>‘this chicken’</td>
</tr>
<tr>
<td>10.</td>
<td>zi</td>
<td>e-zi eyzi nkuku</td>
<td>‘these chickens’</td>
</tr>
<tr>
<td>11.</td>
<td>lu</td>
<td>o-lu oolu luba</td>
<td>‘this kraal’</td>
</tr>
<tr>
<td>12.</td>
<td>li</td>
<td>e-zi eyzi ziba</td>
<td>‘these kraal’</td>
</tr>
<tr>
<td>13.</td>
<td>a</td>
<td>aka aaka kana</td>
<td>‘this small child’</td>
</tr>
<tr>
<td>14.</td>
<td>a</td>
<td>o-tu ooku twana</td>
<td>‘these small children’</td>
</tr>
<tr>
<td>15.</td>
<td>u</td>
<td>o-ku ooku kulya</td>
<td>‘this feeding’</td>
</tr>
<tr>
<td>16.</td>
<td>ku</td>
<td>o-ku ooku kungande</td>
<td>‘this</td>
</tr>
<tr>
<td>17.</td>
<td>a-</td>
<td>a-w-a aawa aciluli</td>
<td>‘here on the roof’</td>
</tr>
<tr>
<td>18.</td>
<td>mu</td>
<td>o-mu oomu munganda</td>
<td>‘in the house’</td>
</tr>
</tbody>
</table>
### Demonstrative 'that' (near the person spoken to) (5)

<table>
<thead>
<tr>
<th>class</th>
<th>prefix</th>
<th>example</th>
<th>English gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>u</td>
<td>o-yo oyo muntu</td>
<td>'that person'</td>
</tr>
<tr>
<td>2.</td>
<td>ba</td>
<td>a-bo aabo bantu</td>
<td>'those persons'</td>
</tr>
<tr>
<td>3.</td>
<td>u</td>
<td>oyo ooyo mubanga</td>
<td>'that mubanya tree'</td>
</tr>
<tr>
<td>4.</td>
<td>i</td>
<td>eyo eeyo mibanga</td>
<td>'those mibanga trees'</td>
</tr>
<tr>
<td>5.</td>
<td>li</td>
<td>e-lo eelyo linyo</td>
<td>'this tooth'</td>
</tr>
<tr>
<td>6.</td>
<td>a</td>
<td>ayo aayo mano</td>
<td>'those teeth'</td>
</tr>
<tr>
<td>7.</td>
<td>ci</td>
<td>eco eeco cisote</td>
<td>'that hat'</td>
</tr>
<tr>
<td>8.</td>
<td>zi</td>
<td>ezyo ezyo zisote</td>
<td>'those hat'</td>
</tr>
<tr>
<td>9.</td>
<td>i</td>
<td>eyo eeyo nkuku</td>
<td>'that chicken'</td>
</tr>
<tr>
<td>10.</td>
<td>zi</td>
<td>ezyo eeyo nkuku</td>
<td>'those chickens'</td>
</tr>
<tr>
<td>11.</td>
<td>lu</td>
<td>olo olo luba</td>
<td>'that kraal'</td>
</tr>
<tr>
<td>12.</td>
<td>a</td>
<td>ayo aayo maba</td>
<td>'those kraals'</td>
</tr>
<tr>
<td>13.</td>
<td>zi</td>
<td>ezyo eeyo ziba</td>
<td>'those kraals'</td>
</tr>
<tr>
<td>14.</td>
<td>ka</td>
<td>ako aako kana</td>
<td>'that small child'</td>
</tr>
<tr>
<td>15.</td>
<td>tu</td>
<td>oto oto twana</td>
<td>'those small children'</td>
</tr>
<tr>
<td>16.</td>
<td>ku</td>
<td>oko oko kulya</td>
<td>'that feeding' (shock)</td>
</tr>
<tr>
<td>17.</td>
<td>ku</td>
<td>oko oko kunganda</td>
<td>'there on the roof'</td>
</tr>
<tr>
<td>18.</td>
<td>mu</td>
<td>omo omo munganda</td>
<td>'there in the house'</td>
</tr>
</tbody>
</table>

### Possessives (6)

<table>
<thead>
<tr>
<th>class</th>
<th>prefix</th>
<th>example</th>
<th>English gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>wa (u-)</td>
<td>muntu wangu</td>
<td>'my person'</td>
</tr>
<tr>
<td>2.</td>
<td>ba(u-)</td>
<td>bantu bangu</td>
<td>'my persons'</td>
</tr>
<tr>
<td>3.</td>
<td>wa(u-)</td>
<td>musamu wangu</td>
<td>'my medicine'</td>
</tr>
<tr>
<td>4.</td>
<td>ya(u-)</td>
<td>misana yangu</td>
<td>'my medicines'</td>
</tr>
<tr>
<td>5.</td>
<td>lya(li-a)</td>
<td>linyo iyangu</td>
<td>'my tooth'</td>
</tr>
<tr>
<td>6.</td>
<td>a(a-a)</td>
<td>mano angu</td>
<td>'my teeth'</td>
</tr>
<tr>
<td>7.</td>
<td>ca(ci-a)</td>
<td>cisote cangu</td>
<td>'my hat'</td>
</tr>
<tr>
<td>8.</td>
<td>zya (zyi-a)</td>
<td>zysote zyangu</td>
<td>'my hats'</td>
</tr>
<tr>
<td>9.</td>
<td>ya(u-a)</td>
<td>nkuku yanga</td>
<td>'my chickens'</td>
</tr>
<tr>
<td>10.</td>
<td>zya(zya-a)</td>
<td>nkuku zyangu</td>
<td>'my chickens'</td>
</tr>
<tr>
<td>11.</td>
<td>lwa (lu-a)</td>
<td>luba lwanagu</td>
<td>'my kraal'</td>
</tr>
<tr>
<td>12.</td>
<td>ka(ka-a)</td>
<td>kakkuku kangu</td>
<td>'my small chicken'</td>
</tr>
<tr>
<td>13.</td>
<td>twa (tu-a)</td>
<td>tukkuku twangu</td>
<td>'my small chickens'</td>
</tr>
<tr>
<td>14.</td>
<td>bwa (bu-a)</td>
<td>bufwi bwakwe</td>
<td>'his jealous'</td>
</tr>
<tr>
<td>15.</td>
<td>kwa (ku-a)</td>
<td>kulya kwakwe</td>
<td>'his eating'</td>
</tr>
<tr>
<td>16.</td>
<td>a(a-a)</td>
<td>anganda akwe</td>
<td>'at his home'</td>
</tr>
<tr>
<td>17.</td>
<td>kwa (bu-a)</td>
<td>kumungi kwabo</td>
<td>'his home'</td>
</tr>
<tr>
<td>18.</td>
<td>mwa (muuna)</td>
<td>munganda mwabo</td>
<td>'in his house'</td>
</tr>
</tbody>
</table>
### Adjectives (modifiers) (7)

<table>
<thead>
<tr>
<th>class</th>
<th>prefix</th>
<th>example</th>
<th>English gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>mu</td>
<td>muntu mubotu</td>
<td>‘good person’</td>
</tr>
<tr>
<td>2</td>
<td>ba</td>
<td>bantu babotu</td>
<td>‘good persons’</td>
</tr>
<tr>
<td>3</td>
<td>mu</td>
<td>mubanga mupati</td>
<td>‘big mubanga tree’</td>
</tr>
<tr>
<td>4</td>
<td>mi-</td>
<td>mibanga mipati</td>
<td>‘big mubanga trees’</td>
</tr>
<tr>
<td>5</td>
<td>li</td>
<td>linyo lipati</td>
<td>‘big tooth’</td>
</tr>
<tr>
<td>6</td>
<td>ma-</td>
<td>mano mapati</td>
<td>‘big teeth’</td>
</tr>
<tr>
<td>7</td>
<td>ci-</td>
<td>cisote cipati</td>
<td>‘big hat’</td>
</tr>
<tr>
<td>8</td>
<td>zi</td>
<td>zisote zipati</td>
<td>‘big hats’</td>
</tr>
<tr>
<td>9</td>
<td>n-</td>
<td>nkkuku mpati</td>
<td>‘big chicken’</td>
</tr>
<tr>
<td>10</td>
<td>n-</td>
<td>nkkuku zipati</td>
<td>‘big chickens’</td>
</tr>
<tr>
<td>11</td>
<td>lu-</td>
<td>luba lupati</td>
<td>‘big kraal’</td>
</tr>
<tr>
<td>12</td>
<td>ka-</td>
<td>kakkuku tunini</td>
<td>‘small chickens’</td>
</tr>
<tr>
<td>13</td>
<td>tu</td>
<td>tukkuku bupati</td>
<td>‘exceeding jealousy’</td>
</tr>
<tr>
<td>14</td>
<td>bu</td>
<td>bufwi bupati</td>
<td>‘exceeding jealousy’</td>
</tr>
<tr>
<td>15</td>
<td>ku</td>
<td>kubeleka kupati</td>
<td>‘hard jealousy’</td>
</tr>
<tr>
<td>16</td>
<td>a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>ku</td>
<td>kumunzi kubotu</td>
<td>‘beautiful village’</td>
</tr>
<tr>
<td>18.</td>
<td>mu</td>
<td>mungandu mubotu</td>
<td>‘beautiful house’(inside)</td>
</tr>
</tbody>
</table>

### 3.4 Modification

#### 3.4.1 English

A provisional list of example modifier – noun configuration is given below;

Tall man  
Small goat  
Short boy  
Big house  
Beautiful lady  
Mad woman  

Note that all the modifiers in the above examples precede the nouns.

#### 3.4.2 Tonga

A provisional list of example modifier – noun configuration is given below;

Muntu mulamfu ‘tall man’  
Mpongâ syoonto ‘small goat’  
Musankwa mufwaafwi ‘short boy’  
Nganda pati ‘big house’
Musimbi mubotu ‘beautiful lady’
Mukaintu usondokede ‘mad woman’

Note that all the modifiers in the above examples come after the nouns.

3.5 Determination of Coordinate Structures
Coordinate structures are those structures that are joined by a conjunctor such as ‘and’ or ‘or’. Here the study investigates determination of coordinate structures in both English and Tonga.

3.5.1 English
Example structures
These trees and houses are beautiful
Those trees and houses are beautiful

3.5.2 Tonga
Example structures
Zisamu eezi aamanda aaya mabotu
Zisamu eezyo aamanda aayo mabotu

3.6 Definiteness in Tonga
Apart from the use of demonstratives, possessives and high tone, Tonga largely depends on the speech context for definiteness and indefiniteness. The study showed that participants in a given piece of discourse have shared knowledge about the subject. If the speaker and the listener know the topic, definiteness is assumed. However, if the listener by way of seeking clarity asks on the presupposed referent, one concludes that such an utterance is indefinite.

3.7 Conclusion
This Chapter has presented only the findings that will help address the research objectives. The findings have been arranged according to the subcategorisation, that is, determination and modification.
To that effect, the next Chapter discusses the findings in this Chapter in relation to the research objectives and the theoretical framework.
CHAPTER FOUR
DISCUSSION

4.0 General
In the previous Chapter of the dissertation, the findings of the study have been presented without any effort to discuss or comment on specific features. The Chapter presented these findings in form of categories and subcategories of determination and modification. The Chapter ended with a summary of the contents of the chapter as a whole.

In the present Chapter the findings outlined in the preceding Chapter are discussed in light of the research objectives and the theoretical and contextual framework of the study. The Chapter begins by providing an argument in support of the existence of a determiner phrase as presented in the phrase structure rules of the syntactic base component. Modification is handled immediately afterwards. The Chapter thereafter unfolds to discuss ‘determination by the article’ in English and Tonga with reference to word order. Determination by demonstratives, possessives and numerals is discussed subsequently. The Chapter further discusses agreement within the phrase. The morphological implications of the operation are also discussed here together with definiteness and incorporation in Tonga

4.1 Headness-Why a Determiner Phrase
This section discusses ‘determination’ and ‘modification’ with reference to the phrase structure rules with the view to presenting an apologia for the existence of a determiner phrase and not a modifier phrase. Arguably, the two grammatical concepts do not receive the same syntactic status in the phrase structure rules, which are re-write rules. The re-write rules are seen as a linguistic device that can be used to generate potentially all and only grammatical sentences in a given language. Hereunder is a manifestation of the phrase structure rules as discussed by Crystal (1971);

\[ S \rightarrow NP + VP \]
\[ VP \rightarrow V + NP \]
\[ NP \rightarrow DET + N \]
\[ V \rightarrow \text{chased} \]
\[ N \rightarrow \text{girl, dog} \]
The first rule states that a sentence can consist of a noun phrase and a following VP; the second, that a VP can consist of a V and a following NP; the third, that a NP can consist of a determiner and a noun. Each abstract category is then related to the appropriate words, thus enabling the sentence to be generated.

As Crystal (1987:97) points out, "the history of generative syntax since 1957 is the study of the most efficient ways of writing rules, so as to ensure that a grammar will generate all the grammatical sentences of a language and none of the ungrammatical ones". Although there is a departure from the rudimentary syntactic model, recent generative grammars have maintained the fundamental conception of sentence organization as a single process of syntactic derivation and it is this that distinguishes this approach from those accounts of syntax that represent grammatical relations using a hierarchy of separate ranks.

From the foregoing, it is clear that the basic PS-rules expounded in Chomsky's Syntactic Structures provided only for determination and not modification. Thanks to the subsequent generative refinement that modification became optionally part of the PS rules. Put another way, even after its inclusion in the PS-rules, modification is merely an optional grammatical element - its absence would in no way make the sentence ungrammatical.

4.1.1 Determination
Determination encompasses determiners (articles, demonstratives, possessives, numerals). A closer look at Phrase Structure rules reveals an arbitrary inclusion of determination in the base component of Transformational Generative Grammar. Arguably, determination received wide acceptance in the syntactic well-formedness of sentences. It would appear determiners were not mere appendages of the noun but autonomous linguistic elements - no wonder they are not bracketed in round brackets (round brackets denote option).
Consider again the rule: NP → DET + N. Its linguistic independence is traceable and recognizable in the fact that its manifestation in the schema does not differ from any other linguistic element, firstly DET like V or NP is not bracketed. Secondly, both DET and N are non terminal nodes. Both have the fulfillment in the terminal node where actual morphemes (words) are introduced. Suffice to say, determination has retained its place in grammar since the era of systemic linguistics.

4.1.2 Modification
Modification has been used here to include adjectives, and only adjectives (modifiers). Within the framework of PSG, modification does not appear, at least as we know it today. The PS-rules, the basis upon which PSG relied heavily, do not even in the slightest sense, account for modification. The only slot provided is that occupied by Determiners – whether Det was a dummy to represent both determination and modification is another question the paper does not seek to address here. For this space, however, it has become clear that even in Chomsky’s *Syntactic Structures*, the PS-schema did not account for modification.

In generative notation, however, adjectives were introduced in round brackets to indicate that they were only optional linguistic elements – the node MOD (for modifier) was never introduced despite the inclusion of an optional adjective. Consider the following rule.

NP → DET (Adj) + N

As pointed out (in 4.1.1) the bracketed elements are optional in a sentence, that is, the sentence would be grammatical even if the element were left out. Logically, one would conclude here that modification was and still is an optional linguistic operation. That is, modifiers unlike determiners are mere appendages of the nominal counterpart. This would explain in part why PSG hardly provided modification a slot in the PS schema (rule). Stemming from this revelation, it is linguistically correct to conclude that there is no such thing as a Modifier Phrase, only because modifiers are optional syntactic elements.
4.2 Determination by Articles

Three kinds of articles are suggested in English; the definite the, the indefinite a, and the zero article Φ. A survey of Tonga through both literature and observation reveals a non-availability of the articles which are found in English, yet the concepts of definiteness and indefiniteness could not be said to be altogether alien. It was observed that interlocutors were able to distinguish a definite reference from a non-definite one based on the speech context, that is, the shared knowledge between the speaker and the listener. Note that “article” is a term used in traditional grammar to describe a particular subclass of determiners.

4.2.2 Determination by Article in English Language

In Chapter Three, the research findings show that three kinds of articles can be identified in English, namely, the definite the, the indefinite a/an and the zero article. Expressions containing a determiner ‘the’ are said to have definite reference in that they refer to an entity which is assumed to be known to the addressees; for example, in a sentence such as ‘The man in black slacks’, the determiner phrase ‘the man’ refers to a specific man whose identity is assumed to be known to the hearer/reader.’ By contrast, expressions containing a determiner like ‘a’ have indefinite reference, in that, for example, if one says ‘A man in black slacks’, one does not assume that the hearer/reader knows the person about whom one is talking.

A zero article is usually an element which is posited at some level of representation but whose realization is null (Radford 1997). Thus a DP such as ‘woman’ in which there is no overt determiner, is often said to have a zero determiner (Φwoman) in opposition to those of ‘the woman’ or ‘a woman’.

4.2.3 Determination by Article in Tonga

The research findings reveal that Tonga unlike English does not possess the subclass ‘article’ in the domain of determination. As Good (1953) puts it, there is nothing in Tonga that can strictly be said to correspond to the English definite and indefinite articles. It was observed that context instead plays a vital role in establishing definiteness
or indefiniteness. It was noted that musimbi ‘girl’ may denote girl, a girl, or the girl, and this can be interpreted based on the context.

4.3 How Determination Affects the Underlying Phrasal Categorial Features of the Determiner Phrase: Phrasal Configuration
The discussion here looks upon the way English and Tonga present their determiners in a linear fashion: this is in an effort to address one of the research objectives which entails investigating how determination and modification affect the underlying phrasal categorical features of the determiner phrase, namely, word order. The section, to that effect, has adopted the title ‘phrasal configuration’. It should be remembered that word order in linguistics usually refers to the sequence in which grammatical elements such as subject, verb and object occur in sentences (Crystal 1987). In this study, however, ‘word order’ has been strictly used to explain the linear structure of the determiner phrase, and the study has from time to time used the term ‘phrasal configuration’ to refer to word order. Note that phrasal configuration is another inescapable feature of contrast between English and Tonga. This section will purely present the structure of the determiner phrase with special reference to the tree structure of individual determiners (demonstratives, possessives, and numerals).

4.3.1 Determination and Word Order in English
4.3.1.1 Articles (a, the and Φ)
From the findings, articles as the subset of determination always precede the noun they ‘modify’. Put another way especially in principles and parameter language, the determiners (‘a’ the Φ) are head first-position in the Determiner – noun configuration.

Consider the schema below:

\[
\begin{array}{cc}
\text{Indefinite} & \text{Definite} \\
A \text{ man in slacks} & The \text{ Man in slacks}
\end{array}
\]

\[
\begin{array}{cc}
\text{S} & \text{S} \\
\text{DP} & \text{DP} \\
D & D \\
A & The \\
\text{man} & \text{man} \\
in slacks & in slacks
\end{array}
\]
Zero Article    Women like dolls.

The zero article occupies the same position as the indefinite or definite article – it cannot be post nominal because of the following reasons:

(i) English is a head first language; that is, the consistency already noticed with other articles discussed applies even to the Φ article.

(ii) Even though the Φ article is not physically realized, its semantic and syntactic roles are being felt. Syntactically, as Radford (1997:152) argues, “the empty node of D in the DP is not necessarily empty – it is covertly occupied hence satisfying the syntactic requirement of the DP (Determiner phrase)”.

This therefore means that the structure of the schema of the determiner phrase in English is one. Put another way, to maintain the internal consistency of the determiner phrase one schema for the determiner phrase should exist to account for determination in sentences that denote either definiteness or indefiniteness or zero article. Let us suppose this were the schema:

C
   /\    DP
  /   \   
N    D

Where: ‘N’ means noun and ‘D’ determiner. Given sentences like

(a) A man in slacks

(b) The man in slacks

(c) Men in slacks
(a) and (b) fail to handle and account for both the deep structure and surface structures of the sentences in question. If the schema were thus, determination in English could be post nominal, which unfortunately is not the case. English word order collapses, hence both syntactic and semantic conditions cannot be met – the operation in minimalist language collapses – the conditions at both syntactic and semantic levels are unsatisfied.

But what is wrong with (c)? It would appear the position of the determiner node does not matter. After all the structure is the same and the meaning too. If one takes or sustains the principle of economy in linguistics, then one schema should be used to account for word order where articles are concerned. And the only schema is one that can be used to handle sentence (a) and (b), which is
This schema is understood to mean that whatever (sort of) article there could be in English, such articles precede the nominal element, and they are endocentric heads of the phrase – hence, the determiner phase.

4.3.2 Determination and Word Order in Tonga

Observably, Tonga does not possess articles. However, since a determiner phrase is a linguistic universal enshrined within the universal grammar, Tonga has by implication the same schema that would have accounted for articles had they been in the language. But the question that arises is whether the schema would have been that of the English language. Basically, there are two possible responses to this question: yes and no.

Yes, in that the schema could be the same yet the manifestation of the schema could be different. No, in that word order in Tonga is the opposite of what it is in English. Therefore, all the different schema must be formulated to account for Tonga determiner phrases. What seems logical is to have the same schema at an abstract level, which is a theoretical level and a different one for each language at the physical level. This will be shown by using demonstratives which are found in both English and Tonga.

4.3.2.1 Demonstratives

This section continues to present the phrasal configuration of the determiner phrase under the sub-theme of demonstratives. Note that in both English and Tonga, demonstratives serve generally to indicate the location of the intended referent(s) of the determiner phrase with respect to the context of utterance (Asher 1994:2849). However, what the research set out to establish is whether demonstratives occupy the same position in relation to the noun in both English and Tonga. The findings in Chapter Three show that the two languages differ in the way they treat demonstratives with regard to word order. Consider the example sentences below;
1. English: this man on the hill  
   Tonga: oyu muntu aakulu, or muntu ooyu aakulu

A generalization concerning demonstratives in both English and Tonga can be made following the examples above. In English, demonstratives always precede the noun irrespective of the speaker's intended meaning. Put another way, in both referring and non-referring expressions, demonstratives in English are placed before the nominal
material. On the contrary, Tonga shows a vacillation, that is, a demonstrative in Tonga can either precede or follow the noun, and this depends on whether the expression is emphatic or non-emphatic. In emphatic referring expressions the demonstrative precedes the nominal material. Elsewhere, the demonstrative is placed after the noun.

In the Tonga novels reviewed, 75% of the context where demonstratives were used, they were after the noun hence non emphatic. A quarter of demonstratives preceded the nominal material, and hence were emphatic. Note that the choice one makes when using demonstratives in Tonga is not merely a fact of being stylistic, the position of the demonstrative in a given expression plays a semantic role as it distinguishes emphatic referring expressions from non-emphatic referring expressions.

From the foregoing, one can without reserve postulate that two tree structures are needed to present demonstratives in Tonga. One for demonstratives which precede the noun and the other for those that are used in the post nominal position. Without such a dichotomy, any discussion on demonstratives in Tonga would fail to capture both the external and internal structures of the determiner phrase involving demonstratives.

4.3.2.2 Determination by Numerals
In relation to the purpose of the present study, under the sub theme of numerals, a contrastive account of how numerals are positioned in the linear order within a determiner phrase in English and Tonga is presented here. Note that numerals are looked upon in this study as one of a set of words or other expressions indicating precise numbers within the class of determiners. Only ordinal numerals are discussed, captioned as phrases. Consider the examples below;

Examples
1. English: five houses
   Tonga: manda osanwe ‘houses five’
Ordinarily, the place of the numerals in Tonga is after the noun. To that effect, two different tree structures emerge to capture the same concept of numeral material in English and Tonga. The above tree diagrams incontrovertibly show that English unlike Tonga position its numeral material before the noun. This, therefore, as minimalists would argue, confirms the assertion that a given language only chooses one of the binary choices specified in the universal grammar. Such a linguistic revelation meets, in part, one of the expectations of this study’s theoretical and contextual framework regarding word order within a phrase.

4.3.2.3 Demonstratives and Numerals

In an instance where a demonstrative and a numeral are used with a noun, generally in English the order is such that a demonstrative precedes a numeral, for example:

Example

these five houses
In Tonga it is a different matter all together. It is possible to have both the demonstrative and the numeral following a noun, as in:

manda *aaya osanwe* literally translated means: ‘houses these five’ or a demonstrative preceding the noun while the numeral following the noun as in:

*a* manda *osanwe* laterally translated: ‘these houses five’

It could be argued, therefore, that demonstratives and numerals when used together in English virtually always precede the noun. Note that used in this way, the numeral automatically assumes a different title – it becomes a central determiner according to Quirk et al (1995). If this order is not followed in the case of English then it could be because of some stylistic or poetic intent.

Diagrammatically they can be shown thus;

\[
\text{English} \quad \begin{array}{c}
\text{DP} \\
\text{Det} \\
\text{N} \\
\text{Det} \\
\text{(Nu)} \\
\text{(Dem)} \\
\text{These} \quad \text{five} \quad \text{houses}
\end{array}
\]

\[
\text{Tonga} \quad \begin{array}{c}
\text{DP} \\
\text{Det} \\
\text{Det} \\
\text{N} \\
\text{Det} \\
\text{Dem} \\
\text{Nu} \\
\text{Manda} \quad \text{aaya} \quad \text{osanwe}
\end{array} \quad \text{or} \quad \begin{array}{c}
\text{DP} \\
\text{Det} \\
\text{N} \\
\text{Det} \\
\text{Dem} \\
\text{Nu} \\
\text{Aya} \quad \text{manda} \quad \text{osanwe}
\end{array}
\]

The tree diagrams above obviously reveal a unique linguistic feature previously not captured in the universal grammar, that is, it is possible to have a language which obeys two parameters. Tonga is such a language. The word order involving a nominal element
and a determiner especially demonstratives and numerals show that a speaker reserves the right to use structure (a) or (b) above. It is contended here that the difference between structure (a) and (b) is far beyond linguistic stylistics, or poetic. Each structure (a and b) has its own recognized semantic value. Put another way, both structures are considered natural. When one chooses to use structure (a) one does so with a clear linguistic knowledge for a specific illocutionary effect.

This research therefore has endorsed that Tonga is one of the few languages within the universal grammar that ‘defies’ the parametric binary choices specified within the universal grammar. It has been noted here that Tonga oscillates between specifier-first and specifier-last parameters. This is against the held view that a language that takes on any specifier before the head word within a phrase, obeys that parameter in totality. Demonstratives and numerals proper in Tonga have shown that the choice is not obligatory but rather depends on the speaker’s linguistic (semantic) intent. English on the other hand, shows a rigid parametric binary choice; it is always determiner-first and noun-last. And this fits in with the assertion in the universal grammar.

Note that to deny a language like Tonga a privilege to be blind to the binary choices especially where demonstratives and numerals are concerned is to force such a language into the mould of English, just as in earlier periods languages were forced into that of classical Latin (Robinson 1975). It has been concluded here that determiner phrases containing demonstratives in Tonga do not fit in the suggested linguistic parameters in universal grammar. It is not just an exception to the rule but rather a contribution to the rule. This phenomenon marks out Tonga to be unique unlike English.

4.3.2.4 Numeral and Article
When confronted with data involving numerals proper and articles, the research findings show that the article whether indefinite or definite precedes the numeral material in English. The study does not want to bother itself with a discussion of Tonga in the light of numerals and articles because, as shown in 4.2.2, Tonga does not possess articles. Therefore the phenomenon under discussion is exclusive to English. Consider the examples below;
Examples
a five star hotel
the two brothers
a one goal win

4.3.5 Determination by Possessives

4.3.5.1 Determination by possessives in English
The study restricted itself to four example types of possessives as shown Chapter Three. The list is 'my', 'your', 'our' and 'their'. In terms of the word order within a determiner phrase, possessives virtually always precede the noun they determine as examples here below show;

my tree has been cut
our house is on fire
their daughter has failed the exam

4.3.5.2 Determination by possessives in Tonga
The findings concerning the linear ordering of possessives and nouns within a determiner phrase show that unlike English, Tonga always positions possessives after the nominal element. To try and reshuffle the order does not only result in ungrammaticality, but also in the unintelligibility of the sentence or utterance. Therefore, this fixed order is motivated by both the syntax and the semantics of the language in question. Note the following examples:
muntu wangu "my person"
cisi cangu "my country"
cisi cesu "our country"
musimbi wangu "my girl friend"

Note that wangu (for humans) and cangu (for nonhuman) are the possessive markers, the equivalent of the English 'my'.
4.3.6 Determination of Coordinate Structures
This section of the dissertation discusses determination of coordinate structures in both English and Tonga. Coordinate structures are syntactic structures or units that are joined by a coordinator. The paper restricts itself to the coordinator ‘and’.

4.3.6.1 English
The findings show that it is possible to determine a coordinate structure by use of only one determiner used pronominally. Consider the examples below;

_these_ houses and trees are beautiful
_these_ cows and goats are stubborn
_those_ houses and trees are beautiful
_those_ cows and goats are stubborn
_that_ house and _that_ tree are dirt
_this_ house and _this_ tree are beautiful
_these_ trees and houses are beautiful
_those_ trees and houses are beautiful

possessives
_my_ father and _my_ mother are good
_our_ country and _your_ country have joined SADCC
_our_ country and _yours_ have joined SADCC
_our_ country and _theirs_ have joined SADCC
_his_ son and _his_ wife have gone

Observably, the determiner (these/those) can be used to determine a coordinate structure in English without having to repeat it before the noun after the coordinator. A look at possessives, however, reveals that for the syntactic well-formedness of a sentence, possessives need to be repeated when determining a coordinate structure.
4.3.6.2 Tonga

The findings show coordinate structure constraint when it comes to determination of coordinate structures in Tonga. Matthews (1997:76) states that coordinate structure constraint is a “principle by which forms joined by coordination form an island with respect to syntactic processes or relations”. Consider the examples below;

zisamu eezi aamanda aaya mabotu
zisamu eezyo aamanda aayo mabotu
manda aaya azisamu eezi zibotu
ng’ombe eezi aampongo eezi tazivwi
manda aayo aazisamu eezi zibotu
ng’ombe eezyo aampongo eezyo tazivwi

? ng’nga iiya aacisamu eeci zibotu
? ng’anda ecyi aacisamu eeci zibotu
baata aabamama mbabotu ‘my father and my mother are good’
cisi cesu aacisi canu zyalembya musadc ‘our country and your country have joined sadcc’
cisi cesu aacanu zyalembya musadc ‘our country and yours have joined sadcc’
cisi cesu aacabo zyalembya musadc ‘our country and theirs have joined sadc’
mwana wabo aamukaintu wabo baunka ‘his son and his wife have gone’
muntu wangu aawabo bangwa ‘my person and theirs have been jailed’
cisamu cangu aang’anda yangu zilebeka ‘my tree and my house are attractive’
mukaintu wangu aamukaintu wakwe balalwana ‘my wife and his wife are fighting’
bbuku lyangu aampilensulo yangu zibotu ‘my book and my pencil are handy’

The determiner (demonstratives, possessives) is seen after each noun. In fact each conjunct is determined by a different determiner according to the noun class of a given noun. Thus determination of coordinate structures in Tonga is highly complex as
morphology and syntax are part of the factors influencing the operation. Put another away, determination of coordinate structures is not blind to the morphosyntax of Tonga.

### 4.4 Nature of Determiners during Determiner Phrase Formation

This section aims at discussing the nature of determiners during determiner phrase formation, and the notable nature is the affixal agreement feature of a determiner which no doubt is seen to affect a noun within the phrase. This feature is an outgrowth of determination and modification. The findings seem to suggest that when determination and modification are applied – the affixal materials, namely, determiners and modifiers tend to affect the stability of the nominal structure. This section addresses one of the research objectives which sought to investigate the nature of determiners, and how this affects agreement principle within a phrase.

### 4.4.1 Nature and Affixal Agreement of Determiners in English

#### 4.4.1.1 Definite ‘the’

The research findings show that the determiner ‘the’ as the head of the determiner phrase is a non-selective affixal material. By this one means any noun in English could be ‘predetermined’ by the determiner ‘the’ to make it definite in a referring expression. It was observed that the definite article ‘the’ could be used with both singular and plural nouns on the one hand, and count and non-count nouns on the other. Its linguistic space goes as far as the speaker and the hearer share common ground. Put another way, as long as the cooperative principle is adhered to, the definite article could be used in any referring expression. The assumption being that the hearer knows the referent. The exception to this rule is seen in stylistic or special cases as in “man does not live on bread alone”.

This generalization could be presented in feature terms as below:

\[
\begin{align*}
\text{the [\text{+ Singular}]} & \quad \text{the [\text{+ count}]} & \quad \text{Noun} \\
a) & & + \text{plural} & & \text{Noun} \\
b) & & + \text{Non-count} & & \\
\end{align*}
\]

**Example Sentences**

(a)  
(i) the man in black slacks
(ii) the men in black slacks

(b)  
the oranges
the water
The kind of affixal agreement, that is, in number, nature and manner could be looked upon as a syntactically and morphologically motivated affixal agreement. Thus the nature of the definite article ‘the’ is such that it is blind to the grammatical feature, [number]. As the findings show, it can be used before both singular and plural nouns. It therefore agrees with not only countable nouns, but also uncountable nouns. To this end, therefore, in the light of the research objective that sought to investigate the nature of determiners during any determiner phrase formation, it can be concluded that in terms of the affixal agreement, the definite article ‘the’ can potentially agree with all the different types of nouns in English.

4.4.1.2 Indefinite ‘a’

The determiner ‘a’ as the head of DP is a selective affixal material. It cannot just take any kind of noun. That is, it is not blind to either plural or singular forms of a noun. Both the literature and the informants pointed out that the indefinite article ‘a’ is only used to predetermine a singular noun. Where a non-count noun is involved, it has to precede an adjective in its genitive form as in ‘a piece of furniture/wood’.

Two principal uses of ‘a’ were noted. (i), to denote singularity, and (ii) indefiniteness in referring expressions. This generalization could be presented in feature terms as below:

\[
\begin{align*}
\text{a} & \quad [+ \text{ singular }] \\
\text{[- plural]} & \quad \text{a} \quad [+ \text{ count }] \\
\text{[- non-count]} & \quad \text{Noun}
\end{align*}
\]

Examples

\[
\begin{align*}
\text{a man in black slacks} & \quad \text{exception for non count} \\
*\text{a men in black slacks} & \quad \text{a piece of wood/furniture.}
\end{align*}
\]
**Head Feature**

[+ singular ]  [+ singular ]
[- plural ]  [- plural ]
[- Non count]  [- Non count]

**Checking**

To show that the determiner a only predetermines singular nouns, checking a minimalist feature test is discussed here below. Checking as a grammatical notion means that features borne by a determiner should be replicated or seen in a noun. And by checking, in a one to one fashion, all similar features are deleted in both nodes. If on the other hand, different features are found in both nodes nothing is erased. The meaning therefore is that the structure at both the syntactic and semantic levels collapses. The structure is said to have failed to meet the condition of well-formedness.

The Head features of the determiner a check with the Head features of the noun man in a one to one fashion and all can be erased. Thus the principle of well-formedness has been met.

* A men in black slacks

![Diagram]

**Head Feature**

[+ singular ]  [- singular ]
[- plural ]  [+ plural ]
[+ Count ]  [+ Count ]

The Head features of the determiner a (namely) [+ singular] and [- plural] cannot be checked with those of the noun. They cannot be erased. Thus the principle of well-formedness has not been met. The structure therefore is said to have collapsed. Note: it
could be safely concluded that the indefinite article ‘a’ is exclusively used to
predetermine singular nouns, not plural ones, and that such an operation is both
syntactically and morphologically motivated. Syntactically the determiner a triggers the
grammatical feature number. Morphologically it regulates the form of the noun as it
maintains the noun’s singularity.

4.4.2 Demonstratives (English)
The research findings identified two types of demonstratives, which are, those that denote
‘near the speaker’ and those that mean ‘away from the speaker’. (this, these and that,
those respectively). In this section, demonstratives are discussed under the research
objective that investigates agreement within a determiner phrase.

4.4.2.1 Nature and Affixal Agreement of the Demonstrative ‘this’
The demonstrative ‘this’ denotes ‘near the speaker’. As the head of a determiner phrase,
‘this’ is a selective affixal material. It cannot be used to premodify any plural nouns –
this selectivity or restriction is grammatical in nature. The fact is that ‘this’ can only be
used to premodify a singular count noun and non-count nouns. With regard to singular
count-nouns, the demonstrative ‘this’ can be presented as follows in feature terms:

Example Sentence

this man is good.

\[
\text{this } [+\text{singular}] \quad \text{man } [+\text{singular}]
\]

\[
[- \text{ plural }] \quad \text{Noun} \quad [- \text{ plural }]
\]

\[
[+ \text{ Nominative }] \quad [+ \text{ Nominative }]
\]

\[
[+ \text{ definite}] \quad [- \text{ Definite}]
\]

this waster is cold.

This \quad [+ \text{ count }] \quad \text{Noun}

\[
\text{IP} \quad \text{I} \quad \text{Vp} \quad \text{Adj}
\]

\[
\text{DP} \quad \Phi \quad \text{V} \quad \{\text{good}\}
\]

\[
\text{D} \quad \text{N} \quad \text{is} \quad \{\text{cold}\}
\]

57
Checking

To show that the determiner this only predetermines singular nouns, checking a minimalist feature test is conducted here below. Checking as grammatical notion states that features borne by a determiner should be replicated or seen in a noun. And by checking, in a one to one fashion, all similar features are deleted in both nodes. If on the other hand, different features are found in both nodes nothing is erased. To that effect, the head features of the determiner ‘this’, namely, [+singular], [-plural] are checked against the head features of N and none can be erased. Thus the principle of well-formedness has not been met. The structure is said to have collapsed. It can therefore be safely concluded that the demonstrative ‘this’ is not blind to the grammatical feature number – it can only be used to premodify a singular count noun and in some instances non-count nouns.

4.4.2.1.1 Feature Percolation Principle Involving ‘this’

In the quest to explain the existence of an agreement within a phrase, the research methodology of this study outlined ways in which agreement between determiners and nouns is fostered, and the feature percolation principle was suggested. Note, however, that percolation here has been used as, but not restricted to, the traditional view which looks upon percolation as “an operation by which a feature which is attracted to one category comes to be attached to another category higher up in the structure”. What has
been ignored here is the upward ‘flow’ of features – it has been contended that a horizontal flow is possible. That is, sister nodes can share a feature through the process of percolation. Also, one provides for upward movement of a feature, that is, to the mother node and then downward flow to a daughter node.

Thus in the examination of the affixal agreement involving the demonstrative ‘this’, the features [+ singular] and [-plural] percolate to the sister node, which is the N node to “predetermine” the nature of the noun. The assumption here is that, as one is about to speak, the demonstrative is thought of first in this case, ‘this’. Thus the feature [+ singular] is already processed. The sister N node, which is a noun, is then conditioned by the feature [+ singular] as in ‘This man …’ not ‘this men …”

Percolation illustrated

```
DP
    /\   
   /   \ 
  D-----N

this ----> man

[+ singular]
[+ Def    ]
```

Two possible ways have been presented: (a) that the feature might move horizontally or (b) upward to the mother node, then downward to the target element. If the receiving element responds ‘positively’ that is, accepts the passed on feature, then the principle of well formedness is met resulting in an affixal agreement. If on the other hand, the receiving element responds negatively, that is, rejecting the passed on feature, the structure collapses. Such an affixal agreement failure results in ungrammaticality, as in ‘*this men…”

4.4.2.1.2 The Morphological Implication of the Feature Percolation (Principle)
When an affixal agreement is reached or satisfied, the morphological operation has equally been operational. The feature [+ singular] in the demonstrative ‘This’ triggers the morphological zone not to modify the internal structure of the noun in question. Thus
‘man’ remains unchanged during this process/operation. In an event where ‘men’ was ‘excited’, the morphological operation will lead to an ablaut, that is, the change in the vowel quality /e/ in men to /a/ in man when the demonstrative is ‘this’. It means, as Gleason (1981:164) puts it, “Certain words are required to take forms which correspond in specified ways with certain other words”. The demonstrative ‘this’ shows clearly an instance of concord in number with any noun with which it is associated. In feature terms this would appear thus:

(a) ‘this’ [+ singular] → noun[+singular]

Where: ‘this’ is the demonstrative in its singular form and ‘Noun’ is any noun in its singular form. Morphologically speaking, a noun the determiner of which is in its singular form does not carry a morpheme to indicate plural. Thus affixal agreement is fostered not only by feature percolation, but also morphological implication. The two processes are almost always simultaneously operational on a given determiner – noun phrasal structure.

4.4.2.2 Nature and Affixal Agreement Involving the Demonstrative ‘these’

The demonstrative ‘these’ like ‘this’ denotes near the speaker. Few would deny that ‘these’ is a selective affixal material in that it can only be used with plural count nouns. Note how in feature terms ‘these’ can be presented:

These men are good.

These [+ plural ]

[- singular] Noun

[+ Definite]

* these water are good

Diagram:

```
       IP
          /
         I
        /  
   VP    Adj
       /  
  Φ    good
       /
  V

These {men } are
```

60
As is shown by the above structure, the demonstrative ‘these’ is not blind to the grammatical feature number – it can only be used to premodify a plural count noun. Using the feature percolation principle, one would argue that the feature [+ plural] of ‘these’ percolates and spreads to the N node for concord. The implication of such a process in morphological terms results in affixal agreement illustrated below.

These [+ plural] → N [+ plural]

NB: where ‘these’ is the actual demonstrative and N is any noun in its plural form. The same could be said about ‘that/those’.

It is safe to conclude here that demonstratives in English are sensitive to both the grammatical feature [number] and feature [spatial]; that is near or away from the speaker. In terms of the morphological sameness, the demonstratives and the noun in English do not share any feature at all. Each element enjoys its own morphological identity. Put another way, the shape of the demonstrative in English does not in any way affect the morphological shape of the noun it modifies. This, no doubt, is as a result of non-adherence of English to the Noun Class system, a phenomenon that Tonga does enjoy.

4.4.3 Demonstratives in Tonga
Research findings show that demonstratives in Tonga are of four kinds, varying according as to what is defined as: (1) proximate to the speaker; (2) proximate and enveloping the speaker; (3) proximate to the person spoken to; and (4) remote from both speaker and person spoken to. Note, however, that this study discusses demonstratives under the sub-themes of affixal agreement and feature percolation. This does not overshadow completely what Collins has pointed out. It should be pointed out also that a discussion of demonstratives in Tonga cannot be conclusive without referring to their morphology. As is shown below, demonstratives agree not only in number but also in form with the noun they determine. Refer to the Table in appendix showing demonstratives.
4.4.3.1 Affixal Agreement of the Demonstrative *oyu* ‘this’

The research findings show that the demonstrative *oyu* ‘this’ denotes near the speaker. As the Head of a determiner phrase, ‘*oyu*’ is highly selective affixal material. Firstly, which is a sharp point of contrast between the English demonstrative ‘*this*’ and the Tonga ‘*oyu*’ (this) is that ‘*oyu*’ is only used with nouns of classes 1 and 3. It cannot be used with any other noun classes, let alone inanimate objects. A second point to note is that *oyu* ‘this’ can only be used to modify a singular count noun. This restriction is therefore grammatical in nature. Consider the example below:

*oyu* muntu ‘this person’

In feature terms the structure would be presented thus:

*oyu* [+singular]

[- plural] Noun

[+ noun class]

* *oyu* bantu ‘this people’ or ‘persons’ is ungrammatical as the tree diagram shows below;

```
    IP
     /   \
    /     \ 
  DP     VP
 / \    / \  
D   N   Oyu Bantu
```

Head feature [+ singular] [- singular ]

[- plural ] [+ plural ]

[+noun class] [+noun class]

The head features of the determiner ‘*oyu*’ (this), namely, [+ singular], [- plural] and [+noun class] are checked against the head features of ‘N’ and only the feature [+noun class] is erased. Thus the principle of well formedness has not been met. The structure is said to have collapsed. Checking at both the syntactic and semantic levels requires that the same features be found in the D node and N node if the structure is to be correct both
syntactically and semantically. In the example under discussion, the demonstrative ‘oyu’ has shown that it can only be used with singular nouns of classes 1 and 3. Thus it is not blind to the grammatical feature [number], let alone to the feature [+noun class].

To settle the problem, Tonga like English has a demonstrative aba ‘these’ to be used with plural nouns except Tonga uses it only with nouns of class 2 which is predominately a class for plural animate nouns, for example, classes 3 and 14 have their plural in class 2. Like oyu ‘this’, aba ‘these’ is selective. Consider the examples below:

(i) aba bantu ‘these people’
(ii) *aba misamu ‘these trees’

In feature terms aba would be shown as below:

\[
\begin{align*}
Aba & \quad [+ \text{ plural }] \\
& \quad [- \text{ singular}] \quad \text{Noun} \\
& \quad [+ \text{ animate}] 
\end{align*}
\]

This means that the demonstrative ‘aba’, carries an extra feature [+ person] (animate) as opposed to the English counterpart ‘these’. Collins like most informants argues that each class of nouns has its special demonstrative. And the feature [± person] seems to be distinctive with demonstratives in Tonga. Consider the following examples:

\[
\begin{align*}
\text{oyu} \text{ mombe} & \quad \text{‘this calf’} \\
\text{ezi} \text{ ngombe} & \quad \text{‘these cows’} \\
\text{eli} \text{ bwe} & \quad \text{‘this stone’} \\
\text{aya} \text{ mabwe} & \quad \text{‘these stones’} \\
\text{obu} \text{ bukoko} & \quad \text{‘this beer’} \\
\text{aya} \text{ makoko} & \quad \text{‘these beers’} \\
\text{oku} \text{ kupenga} & \quad \text{‘this suffering’} \\
\text{aya} \text{ mapenzi} & \quad \text{‘these sufferings’} \\
\text{aka} \text{ kana} & \quad \{\text{‘this child’}\} \\
\text{otu} \text{ twana} & \quad \{\text{‘these children’}\} \quad \text{diminutive} \\
\text{eci} \text{ cisamu} & \quad \text{‘this tree’} \\
\text{ezi} \text{ zisamu} & \quad \text{‘these trees’}
\end{align*}
\]
The general feature schema for demonstratives other than oyu and aba would be as follows:

Dem [+ singular]

[- person ] N

Where

: Dem refers to the actual demonstrative

: N stands for a noun that agrees in both class and number with a given demonstrative.

: [+ singular] denotes that a given demonstrative could be either singular or plural, but not both.

: [- person] indicates that such demonstratives do not carry nouns for human beings.

4.4.3.2 Feature Percolation Principle in Tonga Demonstratives

To satisfy the theoretical framework and the methodology of the study, feature percolation has been discussed with special reference to demonstratives in Tonga. Here, too, percolation has been used as but not restricted to the popular/traditional view which considers or takes percolation to be “an operation by which a feature which is attracted to one category comes to be attached to another category higher up in the structure”. It has been argued, in accordance with the research findings, that a horizontal flow of features is possible. Sister nodes can share features through the process of percolation. This is not to overwrite the upward movement of features, that is, to the mother node and then downward flow to a daughter node.

In the analysis of the affixal agreement involving the demonstratives oyu ‘this’/Aba ‘these’, the features [+ singular] and [+ plural], respectively percolate to the sister node, which is the N node, in order to modify the noun. The assumption, as in the English data dealing with demonstratives, is that the atomic feature number realized as either + or - before singular and plural nouns, would have been processed already in the demonstrative prior to affixation, for example, [+ singular] in oyu ‘this’ will have been
processed way before the operation. These features, ([+singular]/ [+plural]), through the process of percolation are ultimately able to condition the noun in the sister ‘N’ node as in:

\[
\begin{align*}
\text{oyu muntu} & \quad \text{‘this person’} \quad [+ \text{ singular}] \\
\text{aba bantu} & \quad \text{‘these people’} \quad [+ \text{ plural }] \\
\end{align*}
\]

[+ person]

Percolation illustrated

```
                               DP
                               \(\text{Or}\)
                               \(\text{D}\)

\(\text{Oyu \quad \quad \quad muntu}\)
```

Features [+ singular] spread to the N node

[+ Person ]

In this regard, the feature [+ person] rejects any noun which is not ‘person’ to occupy the N node. If it does not reject, the affixal agreement involving noun class collapses. The same is true with the grammatical feature number [± singular].

4.4.3.3 The Morphological Implication of the Feature Percolation in Tonga

Observably, as the research findings show, the form of the demonstrative in all cases is replicated in the noun in the N mode. That is, the affixal material in the demonstrative is realized without any alteration in the noun it modifies. Other schools of thought would say that the morphological structure of a noun class would be reflected in the demonstrative. For example, \textit{mu} in \textit{muntu} is reflected in the demonstrative \textit{oyu} ‘this’. In this paper, following the argument that the determiner heads the phrase, it is contended that the \textit{u} in the demonstrative \textit{oyu} ‘this’ is replicated in the noun it modifies – this brings about a morphological agreement. An affixal material \textit{u} in \textit{oyu} modifies morphologically the stem of the noun so that one has \textit{oyu} muntu as opposed to \textit{*oyu} Bantu. Consider the following examples:

\[
\begin{align*}
\text{oyu muntu} & \quad \text{‘this person’} \\
\text{aba Bantu} & \quad \text{‘these people’} \\
\end{align*}
\]
eci cisamu ‘this tree’

\[
\begin{array}{c}
ezi \\
\hline
\end{array}
\]

ezi zisamu ‘these trees’

One observes an instance of agreement not only in number but also in the form. The latter being partly due to the noun class system in Bantu. One should have noticed that demonstratives in Tonga are far more complicated than those of the English language in the way they behave with nouns. Consider the following:

\[
\begin{array}{c}
aka kana ‘this child’ \\
\hline
\end{array}
\]

\textbf{Diminutive}

\[
\begin{array}{c}
otu \\
\hline
\end{array}
\]

\textit{otu twana} ‘these children’

A conclusive examination/analysis of the two structures above shows that Tonga demonstratives unlike the English counterparts have a subclass that denotes diminutive. This has been referred to in this study as an affixal diminutive. Moreover, one observes an instance of morphophonology in the example, \textit{otu twana} which could be analysed as shown below:

\begin{itemize}
  \item Otu tu-ana
  \item \text{U + a = w} \text{ semi vowel formation}
  \item = otu twana: Thus morphology and phonology come together in the formation of the plural diminutive involving ‘otu’ as the demonstrative and bana ‘children’. A feature that is completely alien to demonstratives in English.
\end{itemize}

4.4.3.4 Agreement between Determiner and the Unexpressed but Understood Subject

The research findings show that there is an agreement between the anaphoric/cataphoric determiner (demonstrative) and the unexpressed yet understood subject in terms of number and morphology (form) in Tonga and only in number in English. Agreement in both English and Tonga depends on what is understood as said (from the context). Consider the examples below;

\begin{itemize}
  \item wamba uya (anaphoric) ‘you are talking about that’ (understood as muntu ‘that person’)
\end{itemize}
walikwamba eeci (anaphoric) ‘you were talking about this’ (understood as cisamu ‘a tree’)
tujaye eeyi (cataphoric) ‘we kill this’ (understood as e.g.mpongo ‘goat’)
tujaye eezi (cataphoric) ‘we kill these’ (understood as e.g.impongo ‘goats’)

Note that when people speak, they do not always express the referents especially those that they already mentioned, or indeed those they about to refer to. Thus one of the uses of demonstratives is to refer to what the speaker has said (= anaphoric use) or what the speaker is about to say (= cataphoric use) Chanda (2007). In Traditional Grammar the above manifestation of determination is referred to as pronominal. That is the demonstrative used without a noun is understood to function as a pronoun. This paper contends that such a manifestation is a special use of demonstratives to show both the anaphoric and cataphoric use. It is argued that the nominal node is empty yet understood.

4.5 Binality Principle within the Determiner Phrase

Observably, Tonga has many subcategories within the category of demonstratives. It has been shown that there exists a difference between demonstratives that can be used with humans and those that can be used with non-humans. This can be looked upon as the broad dichotomy within the category of demonstratives in Tonga. For demonstratives that are used with humans, two kinds are noticeable based on the grammatical feature of number, notably singular and plural. The rest of the demonstratives are built primarily alongside the noun classes, that is, each Tonga noun class does agree with a given demonstrative in both number and form. Put another way, there is a morphosyntactic concord between the demonstratives and the noun in a given determiner phrase. As shown, the feature [+ person] is an integral part of the selection criteria during any affixal operation involving demonstratives. To stretch the argument further, the feature [person] broadens the gap between Tonga demonstratives and the English demonstratives, in the contrastive account. The demonstratives (this/these, that/those) do not carry the feature [person] in English. All demonstratives in English are used to premodify either human nouns or non-human nouns. The reason for this could be found in the fact that English has no noun class system as found in Tonga. Thus demonstratives in English are non-person selective. The demonstrative ‘this’ for instance, can be used to premodify either a noun ‘girl’ (which is human) or a noun ‘tree’ (which is nonhuman). A language like this
accounts for linguistic economy. However, it fails to capture the differences that exist among nouns in terms of both the morphology and syntax of the language. Moreover, since there are such nouns as animate and inanimate, determiners as well ought to possess this ability so that animate determiners premodify only animate nouns and inanimate determiners inanimate nouns.

The area of morphological agreement between the determiner and the noun provides yet another premise for contrasts between English and Tonga in the way determination operates. It has been shown that there is a high morphological interaction between affixal elements, that is, a demonstrative and a noun. For example, in Tonga when a demonstrative starts with ‘a’ the noun it modifies will automatically adopt the same element through what has been referred to as feature percolation in this study (for example, aka kana) (‘this child’); this replication of part of the determiner in the noun is consistent in all demonstratives. Thus morphology is a crucial sub-theme in determination in Tonga. This uniqueness in the way determiners and nouns agree morphologically is alien to determination in English. The only morphological agreement one can cite is one that is grammatical in nature – that is number.

To pick out an item, an individual or an entity from the group, it was observed that Tonga relies heavily on word order within the determiner phrase with regard to demonstratives. From the data collected, there is an agreement that in a non-referring expression which has no emphatic tone, the demonstrative follows the noun or the nominal material. Conversely, in referring expressions, the demonstrative always precedes the nominal material it is modifying. Consider the following examples, some of which are from Tonga novels.

**Examples**

1. aba basimbi bategwa mbubasyaakamwale.
   “these girls are called virgin overseers.”
2. aba basankwa bakaindi teebakacizi mamfwaindi pe.
   “these boys of the old generation didn’t know boxing.”
3. bana aaba bakalikuzwa mumbazu zyobile.
   “these children were coming from different directions.”
4. baka mwale aaba ncobakali kujatilwa basyaaka mwale.
   “this is why these virgins were being looked after.”
5. mitiba eeyi njomupulila mazuba ano kwakanyina kaindi.
   ‘these plates you use today were not there in the past.’
6. eeci caaba cakiluli ca bulongo.
   “this plate was made of clay”

Examples 1, 2 and 6 have the same structure regarding the position of the demonstrative in the determiner phrase. Demonstratives in all these sentences are prenominal – they precede the noun they modify. The three examples, therefore, show an instance of referring expression. The examples extracted from novels and other written sources show this clearly as the sentences preceding them were emphatic, hence referring. Consider this text.


“There was one young man with a lot of power/strength. His name was Muuka. This young man beat up all his friends.”

The text shows that the referent has already been identified by the use of the proper noun, Muuka. Nonetheless, the introduction of the demonstrative Oyu ‘this’ is not merely syntactic, but necessary to pick out an individual with emphasis. Put another way, the function of Oyu ‘this’ in that way is beyond discourse, that is, the writer and the reader now share some knowledge about the subject under discussion. This emphatic use of a demonstrative is common in an unnatural, non-neutral speech or discourse.

However, a look at example 3, 4 and 5 shows that the speaker or writer is not necessarily picking out a referent from the group of possible competing forms. The demonstrative after the noun indicates a nonemphatic instance of a demonstrative. The data from written sources are consistent with the primary data. Collins, for example, points out that in a nonemphatic expression the demonstrative is placed after the noun it is modifying. Introspection coupled with the data from informants attest to this fact. Word order, as other suprasegmental features, is crucial in determining the semantic overtones of the
sentence. It is clear from the example above that the syntax of the determiner phrase depends largely on the intended effect of a given expression. As intimated, a referring expression in its emphatic form will always have a determiner (demonstrative) placed before the noun.

4.6 Vowel Doubling

Here reference is made to the doubling of the vowel in word initial position in a demonstrative. The findings noted that demonstratives in Tonga when presented as citation forms do not manifest vowel doubling. Consider the following:

*otu* ‘this’
*aba* ‘these’
*aovo* ‘those’
*aovo* ‘that’

Turn to the examples below. Examples 1 and 2 maintain non-vowel doubling, yet 3, 4 and 5 manifest the feature, vowel doubling.

**Examples**

1. aba basimbi bategwa mbubasyakamwale.
   ‘these girls are called virgin overseers.’
2. aba basankwa bakaindi teebakacizi mamfwaindi pe.
   ‘these boys of the old generation didn’t know boxing.’
3. bana aaba bakalikuzwa mumbazu zyobile.
   ‘these children were coming from different directions.’
4. baka mwale aaba ncobakali kujatilwa basyaaka mwale.
   ‘this is why these virgins were being looked after.’
5. mitiba eeyi njomupulila mazuba ano kwakanyina kaindi.
   ‘these plates you use today were not there in the past.’
6. eeci caaba cakiluli ca bulongo.
   ‘this plate was made of clay’

The research findings, as the examples above, show that there is a consistency in the manifestation of either vowel doubling or non-vowel doubling. Put another way, the two
manifestation of the vowel are mutually exclusive or are in complementary distribution. Where one is found, the other cannot be found. In that way, one can predict their occurrence. Doubling of the vowel is seen only in nonemphatic expressions. In all the examples with emphatic expressions, the vowel at the word initial position is not doubled.

Note that the doubling of the vowel is purely nonemphatic. And some Bantuists, Collins, including, insist that the tendency to say with emphasis demonstratives that have double vowels in nonemphatic expressions typifies an instance of mere emphasis without making the expression emphatic in nature. This, of course, might create an impression that a speaker is referring to a particular entity with emphasis. However, this is just an impression not a reality.

It can be stressed here that in a nonemphatic expression in Tonga involving a demonstrative the following conditions are usually key, namely, (i) doubling of the vowel in the demonstrative element itself, and (ii) the demonstrative must be placed immediately after the noun it modifies.

From the foregoing, it can be stated that demonstratives in Tonga have a wider spectrum of manifestation than those in English. Put another way, demonstratives can be used in different ways to bring about different semantic effects: word order and doubling of the vowel are but some of the characteristics associated with demonstratives in Tonga. On the contrary, demonstratives in English show a rather static and uniform manifestation. In all instances of their use, demonstratives in English precede the noun.

4.7 Incorporation in Tonga

This section makes a comment on the behaviour of possessives in Tonga. It therefore discusses incorporation as a morphological process that brings together the affixal material and the root morpheme in one corporate material in most languages. Strictly speaking, “noun incorporation is the compounding of a noun stem and a verb (or adjective) to yield a complex form that serves as the predicate of a clause” . However, what one observes with possessives in Tonga does not totally meet the basic conditions
for incorporation. To that effect, incorporation here has been used as, but not restricted to, the traditional view which looks upon incorporation as stated above. What has been ignored here is the compounding of a noun stem and a verb. It has been argued here that incorporation can be stretched further to include possessive–noun configuration. However, one maintains the principle that the two elements (that is a noun and a possessive) involved are part of the same word in the surface structure. In deep structure the two elements are seen as independent according to both phonological and syntactic criteria (stress placement and syntactic category). One phenomenon that closely resembles incorporation is stripping, where determiners of the noun phrase are deleted.

Observably, as the research findings show, the Tonga possessive indicator in most linguistic operations especially those that denote consanguinity are subsumed within the root noun. This is noticeable in nouns that, as alluded to, indicate relationship among kinsmen, namely, father/children, mother/children. Consider the following examples:

1. bataata  ‘my father’
2. baama  ‘my mother’
3. baisha  ‘my uncle’
4. musimbi *wangu*  ‘my girl friend’
5. cisi *cangu*  ‘my country’
6. mushonto *wangu*  ‘my young brother’

Note that in 1, 2 and 3 the possessive *wangu*  ‘my’ is not overtly realized. In examples 4, 5 and 6, the possessive *wangu/cangu* is physically realized. Arguably, in the first three examples the possessive is overtly realized in deep structure. That is, the two elements, a noun and a possessive remain as separate words according to both phonological and syntactic criteria. However, in the surface structure the possessive is seen as having been deleted. The process at work is ‘incorporation’. It is said that the possessive has been incorporated within the noun it is modifying. Consider the deep structure of 1, 2 and 3 above.

**Deep Structure**

1. bataata *bangu*  ‘my father’
2. bamaama bangu ‘my mother’
3. baisha bangu ‘my uncle’

At a glance, the operation seems to be an act of ellipsis, where the possessive material is felt to be understood even without it being physically realized. Conversely, as pointed out already, the possessive is ‘fusionalised’ within the nominal material through the process of incorporation. Suffice to say that incorporation here does not provide a physical manifestation of its effect on the root noun that subsumes the possessive. All that is noticed is the ‘disappearance’ of the possessive material itself. Put another way, its extraction site is traceable while its landing site is not. The effect of this operation in Tonga possessive – nominal phrases can only be felt at syntactic and semantic levels. At the morphological level the operation is non effectual in physical terms. By this, one means, the form of the noun is never altered as the case is in other languages that adhere to the operation incorporation.

Note: bataata bangu ‘My father’ is not natural. Informants insisted that the inclusion of bangu ‘my’ is an act of tautology – unrealistic repetition. Commenting on the English counterpart, ‘father’, they noted that its use without the possessive is restricted and confined to the vocative aspect. For example, ‘Dad, don’t forget to buy me sweets’.

Away from the vocative, the use of ‘father’ or ‘mother’ without the possessive would render useless, and, at the syntactic level, the structure would be faulty. The argument can be stretched further in order to have sufficient evidence for the existence of incorporation in Tonga. Consider the following examples from both Tonga and English.

1. ubaite bauso ‘you call your father’
2. ubaite banyoko ‘you call your mother’

In the two Tonga examples, the possessive again is not physically realized yet the concept of possession is understood. Remember, the possessive material is bako in the above examples. If they were realized, the structure would be as follows:
3. ubaite bause *bako* ‘you call your father’
4. ubaite banyoko *bako* ‘you call your mother’

The literature is in agreement with the speakers of the language on this point as they both regard example 3 and 4 as unnatural and a bit forced. Most informants agreed that whereas the sentences are grammatically correct their semantic value borders on derogatory/crude language. It is commonplace to insult using the structure ‘bauso *bako*’ ‘your father’.

From the foregoing, therefore, one would conclude that possessives in Tonga especially those that indicate relationship between children and parents obligatorily incorporate. They are fusionalised within the noun they are modifying even though the morphological shape of the noun is left unaltered. One can never over emphasise the fact that possessives in English do not adhere to incorporation. They are overtly realized all the time to hold the structure grammatically.

### 4.8 Modification

This section of the dissertation addresses the second part of the research’s overall aim, which is modification in English and Tonga with a closer reference to word order and the agreement principle within the phrase.

#### 4.8.1 How Modification Affects the Underlying Phrasal Categorial Features of the Determiner Phrase: Phrasal Configuration

The discussion here looks upon the way English and Tonga present their modifiers in a linear fashion. This is an effort to address one of the research objectives which entails investigating how determination and modification affect the underlying phrasal categorial features of the determiner phrase, namely, word order. Note that phrasal configuration is another inescapable feature of contrast between English and Tonga.
4.8.1.0 Modification in English

4.8.1.1 Word order
According to the research findings, Modifiers, which in this case are purely adjectives, almost always precede the noun they modify except for very few adjectives such as president elect, and transparent international. When accompanied or used together with determiners, adjectives in English are generally positioned between determiners and the head noun, for example,

a small goat (with an indefinite article)
that red book (with a demonstrative)
the tall person (with a definite article)
my big house (with a possessive)

4.8.1.2 Nature and Affixal Agreement of Modifiers in English
There is no clear feature that indicates agreement in both number and form between a modifier and noun in English. As seen above, the adjective red, for example, can be used potentially with any noun as long as the semantic implications are taken care of. It can be used before a singular noun as in the above example or before a plural noun as in ‘red books’. One would without reservation say that modifiers in English are blind to the grammatical feature [number] and the morphological shape of the noun.

4.8.1.3 Headness
Given the fact that modifiers are optional syntactic elements, it suffices to contend that in a modifier – noun configuration a noun heads the phrase. This explains in part why linguists are hesitant to call anything a modifier phrase.

4.8.2 Modifiers in Tonga
The research findings in Chapter Three identified adjectives in Tonga with a nominal prefix. As with determiners, modifiers in Tonga adhere to the morphosyntactic principles. Modifiers agree with the head noun morphologically and syntactically. The phenomenon has been illustrated in the subsequent sections. The investigation noted that there are few purely adjectival roots in Tonga. The following are some of them:

-bota ‘good’
-lamfu long, tall high, deep
-yumu strong, hard dry
-fwiifwi ‘short
-pati ‘big, great’
-Syoonto or niini small, few

Consider below how modification is manifested in Tonga under the following themes: word order and agreement.

**Examples**

muntu **mubotu** ‘good person’
mukaintu **mubi** ‘bad woman’
musune **mupati** ‘big ox’
basimbi **babotu** ‘beautifu girls’
musimbi **mubotu** beautiful girl
mpngo **synoonto** ‘small goat’
musankwa **mulamfu** ‘tall boy’

4.8.2.1 Word order

In terms of word order, modifiers (adjectives) in Tonga are post nominal. It is clear from the research findings, as in the above examples, that modifiers come after the noun, not before it. Collins, as the data show, points out that it would be wrong to put a modifier before the noun, except where special emphasis demands it. Thus a rule of thumb concerning modifiers in Tonga would be an adjective with a nominal prefix generally follows its noun, when used attributively.

4.8.2.2 Nature and Affixal Agreement of Modifiers in Tonga

It was observed that modifiers in Tonga tend to behave as dictated by the affix attached to the noun it is modifying. Therefore, the rule that accounts for affixation in Tonga for modifier – noun agreement is formulated on the basis of noun classes. That is, each noun class affects the modifier differently. The rule can be presented thus

**Rule**

\[X_1] N \rightarrow [X_2 [X] Adj] Np
Where:

[X₁] stands for any prefix attached to a noun of a given class

--- Feature [X₁] in a noun percolates through to the adjective modifying that same noun.

[X₂] is the realization or manifestation of [x₁] in the adjective

[X] stands for a word, the word class of which is adjective

This rule can be referred to as the *affixal agreement* rule in Tonga since the prefix attached to the noun appears also in the adjective. Reconsider the following examples.

Mu-ntu mu-pati ‘a big person’ (singular)

Ba-ntu ba-pati ‘big persons’ (plural)

Mu-simbi mu-botu ‘a beautiful girl’ (singular)

Ba-simbi ba-botu ‘beautiful girls’ (plural)

From the foregoing, the following can be said about modifiers in Tonga. Firstly, modifiers in Tonga are sensitive to the morphological shape of the noun. For example, the grammatical morpheme Mu- in Muntu is in agreement with the Mu- in the modifier Mubotu. Clearly, one observes that modifiers are not blind to the grammatical feature [number]. Secondly, modifiers in Tonga are sensitive to the feature [noun class], for example, the mu- in mubotu is influenced by the muntu of class 1, on the one hand and the ba in babotu by the Bantu of class 2. This can be seen in all the examples above.

Given the fact that modifiers are syntactic optional elements, it is logical to conclude that in a construction involving a modifier and a noun, a noun heads the phrase as opposed to a determiner–noun construction.
4.9 Definiteness in Tonga

The section discusses how Tonga handles definiteness and indefiniteness in line with one of the research objectives. The study is not blind to how the English Language expresses the phenomena in question. As shown elsewhere in this dissertation, English possesses a unique syntactic category that denotes either definiteness or indefiniteness. Few would deny that articles (a/an/the) in English are potentially used to show whether a given expression is definite or indefinite. On the contrary, as Good (1953) puts it, “there is nothing in Tonga that can strictly be said to correspond to the English definite and indefinite articles”. It was noted, for example, that Musimbi ‘girl’ may denote either girl, a girl, or the girl, and this can only be interpreted based on the context. Arguably, one way in which definiteness or indefiniteness is expressed in Tonga is through the speech context. Speech context has been used here to include the participants, content of the discourse, time, and these are largely anchored on shared knowledge of the speaker and the one spoken to. Individual lexical items in Tonga removed from the speech context cannot be used to express either definiteness or indefiniteness. Consider the following sentences devoid of the speech context:

1. musimbi waliko a/the/girl was here
2. mutinta mubotu kapatiki ‘mutinta is very beautiful’
3. bana balakatazya ‘children are difficult’
4. ngombe zyalya mapopwe ‘the/cattle have eaten the maize’

The four examples do not limit their reference the reason being that they are not put in a speech context. The subject musimbi in (1) could potentially refer to any girl, for example. However, the same examples, when given a speech context where the speaker and listener have common ground, the example sentence can denote definiteness. Look at the discourse below: (Conversation)

A: Musimbi waliko ‘The girl came’
B: Hena wasiya bbuka? “Did she leave the book?”
A: Inzya “yes”

Interestingly there is nothing syntactically unique in the sentence by (A) that shows that it is definite. The thought is only captured by the fact that (B) recognizes the referent. The
question by (B) suggests incontrovertibly that A and B have shared knowledge about the girl, and this makes it definite. It is postulated therefore that a speech context is largely responsible for judging whether a given expression is definite or indefinite in Tonga. To push the argument further, one would say that Tonga speakers are not constrained by the absence of definite and indefinite articles as are those of English. Speakers quite naturally distinguish indefiniteness from definiteness depending largely on the speech context. The discourse, particularly the conversational implicatures are indicative of whether a given expression is definite or indefinite.

Note that where the addressee questions the speaker regarding the subject/or assumed referent, one should naturally conclude that such an expression is indefinite as far as the listener and the speech context are concerned.

From the foregoing, it would not be presumptuous to state that the speech context in Tonga regarding definite and indefinite expressions should be looked upon or qualified as a ‘syntactic category’ even as boundary is crucial in phonology. The justification for such a claim emanates from the fact that one cannot fully discuss, locate and understand the concept of definiteness or indeed indefiniteness without heavy reliance on the speech context.

Definiteness and indefiniteness here are discussed without reference to demonstratives which are potentially indicators of definiteness and indefiniteness in some context. This therefore suggests that Tonga does not only depend on demonstratives to capture the notion of definiteness. As intimated earlier, the absence of the syntactic category articles does not place Tonga at a disadvantage compared to the English Language. The speech context assumes the role of articles in Tonga to successfully express the idea of definiteness and indefiniteness among other linguistic elements used for definiteness/indefiniteness.

Note that even where a proper noun has been used, the speech context is still crucial to fully recognize and categorise such an expression as either definite or indefinite. Comparatively speaking, this does not necessarily mean that English does not use context
for definiteness and indefiniteness. It does accept it is always coupled with articles, or other relevant linguistic elements such as demonstratives.

4.10 Summary
The chapter has discussed the research findings in line with the objectives of the study. The Chapter began by addressing determination under different sub-themes among which word order and agreement are not exceptions. The discussion later touched upon determination of coordinate structures, incorporation and modification. The Chapter ended with a discussion on definiteness in Tonga.

The next Chapter presents the overall conclusion of the study. It further draws some recommendations for the refinement of certain statements within the universal grammar concerning the binary choices and areas requiring further research.
CHAPTER FIVE
CONCLUSION AND RECOMMENDATIONS

5.0 General
The previous chapter has discussed the research findings in line with the objectives of the study. The Chapter began by addressing determination under different sub-themes among which word order and agreement are not exceptions. The discussion later touched upon incorporation and modification. The Chapter ended with a discussion of definiteness in Tonga.

This chapter presents an overall conclusion of the dissertation and the recommendations. The conclusion has been divided according to the themes raised in the study. It goes without mention that to conclude such a topic is not without difficulty. However, the dissertation has tried to state and demonstrate that the structure of the determiner phrase (and the noun phrase) is not always the same in English and Tonga, for example, determiners and modifiers in Tonga virtually always come after a noun they modify. Note also that the speaker of a given language knows whether any sentence or phrase is a possible or impossible structure in his or her language.

5.1 Conclusion
5.1 Phrasal Configuration
The study concluded that in terms of word order, determiners and modifiers in Tonga virtually always come after a noun they modify. However, an exception was noted about demonstratives in Tonga. Two possible positions were observed; that is, in emphatic expressions, demonstratives always precede the noun. In nonemphatic expressions, however, demonstratives are placed after the noun. In English, on the other hand, all determiners precede the nominal material they predetermine.

In English constructions which involve a demonstrative and a numeral, numerals always follow demonstratives. This manifestation is also true for Tonga except numerals are always postnominal.

Modifiers in English, which in this case are purely adjectives, are almost always prenominal except those that are of French origin such as president elect, transparent
international. Tonga, on the other hand, has all modifiers post nominal unless they are used for stylistic and poetic effect. It was observed also that Tonga has far too short a list of true adjectives. It is not correct to assume that what is an adjective in English could potentially be an adjective in Tonga. Put another way, a direct translation of an adjective from English does not necessarily produce an adjective in Tonga. Most adjectival material in English when translated into Tonga behave as verbs.

5.1.2 Feature Percolation
The study noted that the features borne by a determiner/modifier percolate to the sister node which is the noun node horizontally, or by upward movement to the mother node and then downward to the target node. It was observed that when the target node accepts the feature passed on, the affixal agreement is completed. However, if the target node rejects or ignores the feature passed on, the operation collapses leading to ungrammaticality. Such structures are a proof to the said; “This man” and “*This men’ respectively.

The percolation principle, it was observed, goes hand in hand with the morphological operation. That is, if the target node accepts the feature passed on, the morphological component triggers a morphological modification to the noun to make it either plural or singular depending on the determiner involved. A modifier is noneffective in this light.

5.1.3 Incorporation
The study found incorporation in data involving possessives in Tonga. It was discovered that nouns indicating consanguinity especially father-children/mother- children/uncle, lose their possessive markers. And the operation was seen to be obligatory. The operation here does not affect the morphological shape of the noun that incorporates the possessive, for example, "Bataata", not *Bataata bangu.

5.1.4.2 Vowel Doubling in Demonstratives in Tonga.
It was noted that in citation form, demonstratives in word initial position have only one vowel, for example, 'aba' 'these'. However, in usage two different manifestations were seen. All demonstratives that were used after the noun, had vowel doubling in the word
initial position. It was concluded that doubling of the vowel was associated with nonemphatic expressions. On the contrary, demonstratives used prenominally had a single vowel; and these expressions were emphatic. It can be said that single a vowel in a demonstrative in Tonga suggests an instance of emphasis. Note that some novels mixed the use of the two types. The researcher took such mix up as mere orthographic error.

5.1.5 Nature of Determiners

5.1.5.1 English.

The nature of determiners in English is plainly developed on the grammatical feature number. That is, there is an agreement in number between the determiner and the noun. Put another way, determiners in English, apart from the article 'the', are not blind to the feature number. It was seen that 'a', 'this', 'that', for example, could only be used before a singular noun. 'These', and 'those', on the other hand, could only predetermine plural nouns. Possessives in English are best looked upon as nonselective affixal material. It was observed that they are all blind to the grammatical feature [number]. Any possessive can readily be used to predetermine any sort of a noun whether plural or singular.

5.1.5.2 Tonga

The nature of determiners is complex and multifaceted. Firstly, they are developed on both the noun class system and the grammatical feature number. Determiners agree not only in number but also in morphological shape of the noun they determine. Secondly, they are sensitive to the feature [person]. The two features [person] and [noun class], are sharp areas of contrast between Tonga and English. One should add here that the subcategory article is not found in Tonga. And this lack (of articles) brings about uniqueness in the way Tonga expresses definiteness – it relies largely on the speech context. In determining coordinate structures, determiners in Tonga are repeated, that is, one before a coordinator and the other after a coordinator. This is because determiners in Tonga ought to agree with the nouns they determine.

5.2 Recommendations

This study recommends the formulation of a syntactic model which should be used to explain grammatical differences that exist between and among languages. Such a model
should not only make generalizations about languages, but point out within the universal
grammar linguistic features that are uniquely identifiable to a particular language. The
study further recommends a re-look at the generalization concerning the binary choices
that a language is said to make between the Head–first and Head–last parameters. Tonga
has shown that it oscillates between these parameters when it comes to demonstratives.

5.2.1 Recommendation for further Research

Any academic piece of work seeks to clarify certain issues. No doubt, in an endeavour to
address these issues, other provoking ones are raised, which unfortunately supersede the
scope of the research objectives. This study has found itself in the same web. Such topics,
therefore, would include the following:

(1) the impact of ‘incorporation’ on both the internal and the external structure of the
determiner phrase;

(2) a detailed analysis of the determiner phrase in Tonga; and

(3) a comprehensive study of the differences between a determiner phrase and a noun
phrase

(4) a morphosyntactic study of coordinate structures in both English and Tonga.
APPENDIX
DATA
The data are presented as sentences /or phrases owing to the fact that the nature of the study does not necessarily require a discourse type. However, reduced discourse type has been incorporated to show the anaphoric and cataphoric use of demonstratives. The appendix starts with determination in English.

DETERMINATION IN ENGLISH

(A) ARTICLES

The man in black slacks
The men in black slacks
The houses are on the hill
The boys and the girls were angry
The teacher was unfriendly
The stone was rough
The water was too cold
A boy was killed in the process
A tree was felled by an axe
A cat sat on the mat
A dream will come true
Women like dolls
Zambia is a landlocked country
People like change

(B) DEMONSTRATIVES
Near the speaker

This man was here
This tree can't be cut
This stone is rough
This house is beautiful
This boy is funny
These men were here
These trees can't be cut
These stones are rough
These houses are beautiful
AWAY FROM THE SPEAKER
That man was here
That tree can’t be cut
That stone is rough
That stone is beautiful
That boy is funny

Those men were here
Those trees can’t be cut
Those stones are rough
Those houses are beautiful
Those boys are funny
Those teachers are highly qualified

(c) NUMERALS
One man can’t change the world
Those two trees can’t be cut
Those three men were here
These five houses are for lectures
Two cars collided yesterday
Four people are needed to complete the task

POSSESSIVES
My boys can’t fail
Our country can’t be left to fools
Our uncle promised us pizza
My mother likes chickens
My father takes a lot of water
Their country has been ruined
Their plants haven’t been watered for a long time
His houses are beautiful
Our houses are beautiful
Our cat can’t take solid food
Our women are lazy
Our people will not survive
Your house is on fire
Your car is on fire
Your students are always complaining
Your wife will soon give birth
Your country will never develop
Your leaders are corrupt
Your leaders are corrupt

MODIFICATION IN ENGLISH
Many people are starving
Many Zambians don’t learn
Tall people are rare nowadays
Tall trees should be cut down
Beautiful ladies can’t be avoid
Beautiful women can be dangerous
Short men can be dangerous
Big people are thoughtful
Smart individuals can be irritating
Small boys are usually trouble some
Fancy cars have flooded the market
Long fair is difficult to maintain
Old people lose their way pretty easily
Good food is an answer to the mal nourished
Good students read around the subject
Fat people can hardly run
Mature students find UNZA a monster for a place
Zambian students are hard working
Note that Tonga data has been presented not according to types of determiners as most sentences contain more than one type of the determiner.

DETERMINERS IN TONGA NUMERAL.

Chanda (2007) points out that the Bantu counting system is a decimal system. And this manifests itself in cardinal and ordinal numbers. Note also that like in other Bantu languages, the numeral system of Tonga is a complex one. This is partly due to its adherence to the morphosyntax of the language. As is shown in the Table below, the study restricts itself to cardinal numbers from 1 to 5, which agree in class with the headnoun. See the Tables below.

### 3.2 Numerals (Collins’ Presentation). Unemphatic Numerals (1)

<table>
<thead>
<tr>
<th></th>
<th>sing</th>
<th>one</th>
<th>pl. two</th>
<th>three</th>
<th>four</th>
<th>five</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>muntu</td>
<td>omwe</td>
<td>ba-bobile</td>
<td>botatwe</td>
<td>bone</td>
<td>bosanwe</td>
</tr>
<tr>
<td>2</td>
<td>musamu</td>
<td>omwe</td>
<td>mi-yobile</td>
<td>yotatwe</td>
<td>yone</td>
<td>yosanwe</td>
</tr>
<tr>
<td>3</td>
<td>ikumbi</td>
<td>lyomwe</td>
<td>ma-obile</td>
<td>otatwe</td>
<td>one</td>
<td>osanwe</td>
</tr>
<tr>
<td>4</td>
<td>bulo</td>
<td>bomwe</td>
<td>ma-obile</td>
<td>ptatwe</td>
<td>one</td>
<td>osanwe</td>
</tr>
<tr>
<td>5</td>
<td>kuboko</td>
<td>komwe</td>
<td>ma-obile</td>
<td>otatwe</td>
<td>one</td>
<td>osanwe</td>
</tr>
<tr>
<td>6</td>
<td>kasimbi</td>
<td>komwe</td>
<td>tu-tobile</td>
<td>totatwe</td>
<td>tone</td>
<td>tosanwe</td>
</tr>
<tr>
<td>7</td>
<td>cintu</td>
<td>comwe</td>
<td>zi-zyobile</td>
<td>zyotatwe</td>
<td>zyone</td>
<td>zyosanwe</td>
</tr>
<tr>
<td>8</td>
<td>ingombe</td>
<td>yomwe</td>
<td>in-zyobile</td>
<td>zyatatwe</td>
<td>zyone</td>
<td>zyosanwe</td>
</tr>
<tr>
<td>9</td>
<td>lugwalo</td>
<td>lomwe</td>
<td>ma-obile</td>
<td>otatwe</td>
<td>one</td>
<td>osanwe</td>
</tr>
</tbody>
</table>


From the table above, the following can be stated:

1. that numerals agree with the noun in question both in number and class; that is, numeral:

Omwe ‘one’ agrees with nouns of classes 1 and 3 in their singular form
Lyomwe agrees with nouns of class 5
Bomwe agrees with nouns of class 14 e.g. bulo bomwe
Komwe agrees with nouns of classes 12 and 15
Comwe agrees with nouns of class 7
Yomwe agrees with nouns of class 9
Lomwe agrees with nouns of class 11

### 3.3 Emphatic Numerals (2)

<table>
<thead>
<tr>
<th></th>
<th>sing</th>
<th>one</th>
<th>pl.</th>
<th>pl. two</th>
<th>three</th>
<th>four</th>
<th>five</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>muntu</td>
<td>umwi</td>
<td>b-</td>
<td>babili</td>
<td>batatu</td>
<td>bane</td>
<td>bosanwe</td>
</tr>
<tr>
<td>2</td>
<td>musamu</td>
<td>umwi</td>
<td>mi-</td>
<td>abiti</td>
<td>itatu</td>
<td>ine</td>
<td>yosanwe</td>
</tr>
<tr>
<td>3</td>
<td>ikumbi</td>
<td>limwi</td>
<td>ma-</td>
<td>abili</td>
<td>atatu</td>
<td>ane</td>
<td>asanu</td>
</tr>
<tr>
<td>4</td>
<td>bulo</td>
<td>bumwi</td>
<td>ma-</td>
<td>abili</td>
<td>atatu</td>
<td>ane</td>
<td>asanu</td>
</tr>
<tr>
<td>5</td>
<td>kiboko</td>
<td>kumwi</td>
<td>ma-</td>
<td>abili</td>
<td>atatu</td>
<td>ane</td>
<td>asanu</td>
</tr>
<tr>
<td>6</td>
<td>kasimbi</td>
<td>kamwi</td>
<td>tu-</td>
<td>tubili</td>
<td>tutatu</td>
<td>tune</td>
<td>tusanu</td>
</tr>
<tr>
<td>7</td>
<td>cintu</td>
<td>cimwi</td>
<td>zi-</td>
<td>zibili</td>
<td>zyotatwe</td>
<td>zine</td>
<td>zisanu</td>
</tr>
<tr>
<td>8</td>
<td>ingombe</td>
<td>imwi</td>
<td>in-</td>
<td>zibili</td>
<td>zitatut</td>
<td>zine</td>
<td>zisanu</td>
</tr>
<tr>
<td>9</td>
<td>ingwalo</td>
<td>lumwi</td>
<td>ma-</td>
<td>abili</td>
<td>atatu</td>
<td>ane</td>
<td>asane</td>
</tr>
</tbody>
</table>

bantu botawe
muntu _omwe_
xisamu _zyone_
xisamu _zyobilo_
cisamu _comwe_
bana _botatwe_

"three people"
"one people"
"four trees"
"two trees"
"one tree"
"three children"
novel: kweema kwa nakalindu  by  b. mwiiinga

the english gloss

‘that day’

‘my husband, i don’t know’

‘his language can confuse your head’

‘in my ignorance’

‘blind people’

‘that language you say i go’

‘those insults are painful’

‘you include all my parents’

‘those people are your father/mother in law’

‘don’t fool my parents’

‘what shall i do to this my husband’

‘i thought that this one would show a good way’

‘i with my own foolishness’

‘this means of promoting the language of our country’

‘this is my husband’s concubine’

‘this he says suits him’

‘the structure of this woman’

‘those with big tummies’

‘what shall i do to this my husband’
"does this person know that when i was a child ……’

‘because of my health’

because of my structure and my workmanship.

‘when many people used to call me ‘beauty’

‘when i allowed your chest to touch mine.

‘because you found me as my father’s virgin.’

‘i don’t fit my parents.’

‘their long hair.’

‘this my hair is different from theirs.’

‘we don’t like long hair’

‘he is explaining many issues.’

‘in tonga there are many voices.’

‘he looked after many people in his village.’

‘the village of this old man is called nanjina.

‘my people go and ask for food.’

‘bed bugs/tsetse flies were sucking their blood.

masendelela mungano  by e. syabbalo

upandulula makani manji. p.v

mu chitonga muli majwi manji

wakalelede bantu banji mumunzi wakwe. p.i

awalo munzi wamunene ooyu utegwa nanjina. p.i

nobantu bangu kamuya kukusunza zilio

ntungu zyakali kubaluma akuba fipa malowa aabo (their). p.5
akuuma ndandala. p.38

he played at his drum.’

wakazyaninina myezi minji akujana zilyo a
zisani zinji.

‘he danced for many months and
raised a lot of food stuffs and cloths.’

wakazyana kaindi kafwifwi naakasika. p. 39

‘he danced for a short time upon
arrival.’

ndandala yakwe nyimbo zyakwe akuzyanana
kawkwe azisani zyakwe…..

‘his drum, his song, his dance and his
kwakwe azisani zyakwe…..

wakalijisi nyimbo zinji, zinonenzya
mucisi cabo kwakaba nzala mpaf
lolo. p. 44

‘he had many beautiful songs.’
‘there was a great famine in their
country.

bakali kulya micelo yamusokwe.

‘they were eating wild fruits.’

wakawete mwanakazi omwe (one)
utegwa nacilimba. 

‘he married one wife called
nacilimba.’

kwakanyina amanzi ankulitesya amoyo
yabo (their).

‘there was no water to cool up
their throats.

bana bangu, amalyookezye. p. 45
milimo) yabo yakaandauka

cilo to cangu.

‘my children, you rest!’
‘their lips cracked.’
‘my dream.’
‘my older brother’

nobapati bangu. 

wakati ‘macu!’ kulela bana milimo wangu ‘to take care of children is my duty’
mupati. p.50

‘this king liked wearing bangles.’

ooyu mwami nakali kyuandisyu kusama
nkaya. p. 50

kwakali basimbi bobile bategwa mwiingwa a
nakaala. p. 56

‘there were two girls called
mwiinga and makaala.

wakabasanina basimbi aabo bobile.
basimbi bobilo bakakla akatoto. p. 59
nakabatambula kabotu akubabambila zilyo zibotu

‘he fed these two girls.’
‘two girls sat under a katoto tree.’
‘he welcomed them and prepared
good food and nice/comfortable
beds.’

aba basankwa bakaindi teebakacizi mafwaindi pe. ‘these boys didn’t know boxing.’

**Zyivo zyakupona kabotu** by fr. j. moreau, s.j.

balayaka maanda mabotu mapati amabwe .... p.1

‘they build beautiful, big stony
houses.

bali jisi amato mapati.

‘they have big boats.’

ziya ezi zyotawwe cijisi mulimo waco. ‘these three plates had each fire.’

context p.19

kwakali musankwa umwi wakalaa nguzu kapat.
izina lwakwe nakali muuka. oyu musankwa
wakazunda beenzinyina boonse.
impumbe eezi yakali kulukwa atoozi. p. 21
impumbe eezi zyakali kulanjika mbuli ....cilundu
catombwe.
ootu toozi teetwakali toozi twaloozi.
ootu tubulo twakali kutengwe malindu. p.22
post nominal 70%
pre nominal 20%

**zilengwa zvabatonga** by ‘ms chidwayi’

zimwi zilengwa eezi, zicicilika mazuba
asunu,mbuli kulya zima lyamuntu, akukona
lubono lwakwe, eezi zyoone zilacitika
ambuli sunu mucisi cino ca butonga.
mucibalo ee ci tu lamvwa zilengwa zyakali
kucita basimbi bakaindi. p.1

‘some of these traditions are still
practiced even in our tonga
country.’

‘in this passage we will learn
traditions involving the girls of long
ago.’

‘when the girl reaches this age of
maturity.

‘they used to remove their the teeth
this way to respect tradition.’

‘this very time, a girl was taught.’

muciindi ee ci ncicona, mutubi naakeelede
kuyisigwa.
cikolo caklwiiya kuji ka zilyo eezi
cakaliwo kaindi. p.2

‘a school to teach how to cook these
foods was there long ago.’

‘many of these songs could not
be sung again’.

ciindi kamwale oooyu navundikwa, ..... 

‘the time this virgin is secluded.’

‘these girls were called virgin
overseers.’
‘these children were coming from
two different ways-parts.’

‘the work of these girls was to cook
for the virgin.

‘these girls were thus called virgin
overseers.’

basimbi aba batengwa mbubasyakamwale. p.7
bana aba balikuzwa mumbazu zyobile.

mulimo wabasimbo aba wakali wakujika ka
mwale.
bakamwale aba ncobakali kujatilwa basyaakja
mwale.
alimwi eciya ciindi ncatolwa
kwosokwe ulijatililwa.

muganda oomu mwakala kamwale ooyu,
takalibuyope.

mitiba eeyi njomupulila mazuba ano kwakanyina
kaindi. p. 8

eeci caaba cakalii cabulongo.

mabisi akali manji kapi ciindi eeco……

demonstratives

1. oyu muntu tacizyi kulima
cultivate’
   aba bantu tabacizyi kulima.

2. oyu mombe muyumu.
   aba bombe mbayumu.

3. elibwe taliliyakusambila
   aya mabwe taliakusambila

4. obu bukoko bulakola.
   aya makoko alakola.

5. oku kupenga, alimwi nee.
   aya mapenzi, alimwi nee.

6. aka kana kalakatazya.
   otu twana tulakatazya.

7. eci cisamu nciyumu.
   ezi zisamu ziyumu..

8. eyi mpongo tizyali.
   ezi mpongo tazizyali.

9. olu luba ndupati.
   aya maba mpati.
   ezi ziba zipati.

‘and that time they take her in the
bush she is helped to walk.’

‘in this house where this virgin lives,
is no ordinary place at all.

‘these places you use nowadays
were not there then’.

‘this plate was of clay.

‘sour was plenty those days’

‘this person doesn’t know how to

‘these persons don’t know how to cultivate’
   ‘this calf is strong’

‘these calves are strong’
   ‘this stone is not for bathing’

‘these stones are not for bathing’
   ‘this beer is strong’

‘these beers are strong’
   ‘this suffering’

‘these sufferings’
   ‘this child is difficult’ (small)

‘these children are difficult’ (small)

‘this tree is hard’
   ‘these trees are hard’

‘this goat is barren’
   ‘these goats are barren’

‘this kraal is big’
   ‘these kraals are big’

‘these kraals are big’
Determination of coordinate structures

English
these houses and trees are beautiful
these cows and goats are stubborn
those houses and trees are beautiful
those cows and goats are stubborn
that house and that tree are dirt
this house and this tree are beautiful

Tonga
manda aaya azisamu eezzi zibotu
ng’ombe eezzi aampongo eezzi tazivwi
manda aayo aazisamu eezzi zibotu
ng’ombe eezyo aampongo eezyo tazivwi
? ng’nga iyya aacisamu eeci zibotu
? ng’anda eeyi aacisamu eeci zibotu

Possessives
my father and my mother are good
our country and your country have joined sadcc
our country and yours have joined sadcc
our country and theirs have joined sadc
his son and his wife have gone

Tonga
baata aabamama babotu ‘my father and my mother are good’
cisi cesu aacisi canu zyalembya musadc ‘our country and your country have joined sadcc’
cisi cesu aacanu zyalembya musadc ‘our country and yours have joined sadcc’
cisi cesu aacabo zyalembya musadc ‘our country and theirs have joined sadc’
mwana wabo aamukaintu wabo baunka ‘his son and his wife have gone’
muntu wangu aawabo bangwa ‘my person and theirs have been jailed’
cisamu cangu aang’anda yangu zilebeka ‘my tree and my house are attractive’
mukaintu wangu aamukaintu wakwe balalwana ‘my wife and his wife are fighting’
bbuku lyangu aampensulo yangu zibotu ‘my book and my pencil are handy’
### Tables showing nominal prefixes in Tonga

<table>
<thead>
<tr>
<th>class</th>
<th>prefix</th>
<th>example</th>
<th>English gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>mu</td>
<td>muntu</td>
<td>‘person’</td>
</tr>
<tr>
<td>2.</td>
<td>ba</td>
<td>bantu</td>
<td>‘person’</td>
</tr>
<tr>
<td>3.</td>
<td>mu</td>
<td>mubanga</td>
<td>‘a mubanga tree’</td>
</tr>
<tr>
<td>4.</td>
<td>mi</td>
<td>mubanga</td>
<td>‘mubanga trees’</td>
</tr>
<tr>
<td>5.</td>
<td>li</td>
<td>linyo</td>
<td>‘tooth’</td>
</tr>
<tr>
<td>6.</td>
<td>ma</td>
<td>mano / menyo</td>
<td>‘teeth’</td>
</tr>
<tr>
<td>7.</td>
<td>ci</td>
<td>cisote</td>
<td>‘hat’</td>
</tr>
<tr>
<td>8.</td>
<td>zyi</td>
<td>zyisote</td>
<td>‘hats’</td>
</tr>
<tr>
<td>9.</td>
<td>n</td>
<td>nkuku</td>
<td>‘chicken’</td>
</tr>
<tr>
<td>10.</td>
<td>n</td>
<td>nkuku</td>
<td>‘chicken’</td>
</tr>
<tr>
<td>11.</td>
<td>lu</td>
<td>luba</td>
<td>‘kraal’</td>
</tr>
<tr>
<td>12.</td>
<td>ka</td>
<td>kakkuku</td>
<td>‘chicken’</td>
</tr>
<tr>
<td>13.</td>
<td>tu</td>
<td>tukkuku</td>
<td>‘small chicks’</td>
</tr>
<tr>
<td>14.</td>
<td>bu</td>
<td>bufwi</td>
<td>‘jealous’</td>
</tr>
<tr>
<td>15.</td>
<td>ku</td>
<td>kubeleke</td>
<td>‘to work’</td>
</tr>
<tr>
<td>16.</td>
<td>a</td>
<td>aciluli</td>
<td>‘on the roof’</td>
</tr>
<tr>
<td>17.</td>
<td>ku</td>
<td>kununzi</td>
<td>‘to the village’</td>
</tr>
<tr>
<td>18.</td>
<td>mu</td>
<td>munganda</td>
<td>‘in the house’</td>
</tr>
</tbody>
</table>

### Table showing demonstrative (this near speaker)

<table>
<thead>
<tr>
<th>class</th>
<th>prefix</th>
<th>example</th>
<th>English gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>u</td>
<td>_ o_yu _ oyu muntu</td>
<td>‘this person’</td>
</tr>
<tr>
<td>2.</td>
<td>ba_</td>
<td>_ a_ab a_ba bantu</td>
<td>‘these persons’</td>
</tr>
<tr>
<td>3.</td>
<td>u_</td>
<td>_ a_y_u _ ooyu mubanga</td>
<td>‘this mubanya trees’</td>
</tr>
<tr>
<td>4.</td>
<td>i_</td>
<td>_ e_y_i _ eeyi linyo</td>
<td>‘this tooth’</td>
</tr>
<tr>
<td>5.</td>
<td>li_</td>
<td>_ e_li _ eeli linyo</td>
<td>‘this teeth’</td>
</tr>
<tr>
<td>6.</td>
<td>a_</td>
<td>_ a aaya mano</td>
<td>‘these teeth’</td>
</tr>
<tr>
<td>7.</td>
<td>ci_</td>
<td>_ e-ci _ eeci cisote</td>
<td>‘this hat’</td>
</tr>
<tr>
<td>8.</td>
<td>zi_</td>
<td>_ e-z_i _ eezi zyisote</td>
<td>‘these hats’</td>
</tr>
<tr>
<td>9.</td>
<td>i_</td>
<td>_ e-y-i _ eeyi nkuku</td>
<td>‘this chicken’</td>
</tr>
<tr>
<td>10.</td>
<td>zi_</td>
<td>_ e-z_i _ eezi nkuku</td>
<td>‘these chickens’</td>
</tr>
<tr>
<td>11.</td>
<td>lu_</td>
<td>_ o-lu _ oolu luba</td>
<td>‘this kraal’</td>
</tr>
<tr>
<td>12.</td>
<td>li_</td>
<td>_ e-z_i _ eezi ziba</td>
<td>‘these kraal’</td>
</tr>
<tr>
<td>13.</td>
<td>a_</td>
<td>_ aaka aaka kana</td>
<td>‘this small child’</td>
</tr>
<tr>
<td>14.</td>
<td>a_</td>
<td>_ o-tu _ ooku twana</td>
<td>‘these smell children’</td>
</tr>
<tr>
<td>15.</td>
<td>u_</td>
<td>_ o-ku _ ooku kulya</td>
<td>‘this feeding’</td>
</tr>
<tr>
<td>16.</td>
<td>ku_</td>
<td>_ o-ku _ ooku kungande</td>
<td>‘this’</td>
</tr>
<tr>
<td>17.</td>
<td>a-</td>
<td>_ a-w-a _ aawa aciluli</td>
<td>‘here on the roof’</td>
</tr>
<tr>
<td>18.</td>
<td>mu_</td>
<td>_ o-mu _ oomu munganda</td>
<td>‘in the house’</td>
</tr>
</tbody>
</table>
### Demonstrative ‘that’ (this near the person spoken to)

<table>
<thead>
<tr>
<th>class</th>
<th>prefix</th>
<th>example</th>
<th>English gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>u</td>
<td>o-yo oyo muntu</td>
<td>‘this person’</td>
</tr>
<tr>
<td>2.</td>
<td>ba</td>
<td>a-bo aabo bantu</td>
<td>‘those persons’</td>
</tr>
<tr>
<td>3.</td>
<td>u</td>
<td>oyo ooyo mubanga</td>
<td>‘that mubanya tree’</td>
</tr>
<tr>
<td>4.</td>
<td>i</td>
<td>eyo eeyo mibanga</td>
<td>‘those mibanga tree’</td>
</tr>
<tr>
<td>5.</td>
<td>li</td>
<td>e-lo eelijo linyo</td>
<td>‘this tooth’</td>
</tr>
<tr>
<td>6.</td>
<td>a</td>
<td>ayo aayo mano</td>
<td>‘those teeth’</td>
</tr>
<tr>
<td>7.</td>
<td>ci</td>
<td>eco eeco cisote</td>
<td>‘that hat’</td>
</tr>
<tr>
<td>8.</td>
<td>zi</td>
<td>ezyo ezyo zisote</td>
<td>‘those hat’</td>
</tr>
<tr>
<td>9.</td>
<td>i</td>
<td>eyo eeyo nkuku</td>
<td>‘that chicken’</td>
</tr>
<tr>
<td>10.</td>
<td>zi</td>
<td>ezyo eezyo nkuku</td>
<td>‘those chickens’</td>
</tr>
<tr>
<td>11.</td>
<td>lu</td>
<td>olo olo luba</td>
<td>‘that kraal’</td>
</tr>
<tr>
<td>12.</td>
<td>a</td>
<td>ayo aayo maba</td>
<td>‘those kraals’</td>
</tr>
<tr>
<td>13.</td>
<td>zi</td>
<td>ezyo eezyo ziba</td>
<td>‘those kraals’</td>
</tr>
<tr>
<td>14.</td>
<td>ka</td>
<td>ako aako kana</td>
<td>‘that small child’</td>
</tr>
<tr>
<td>15.</td>
<td>tu</td>
<td>oto oto twana</td>
<td>‘those small children’</td>
</tr>
<tr>
<td>16.</td>
<td>ku</td>
<td>oko oko kulya</td>
<td>‘that feeding’ (shocked)</td>
</tr>
<tr>
<td>17.</td>
<td>a</td>
<td>awo awo acituli</td>
<td>‘there on the roof’</td>
</tr>
<tr>
<td>18.</td>
<td>mu</td>
<td>omo omo muyanda</td>
<td>‘these in the house’</td>
</tr>
</tbody>
</table>

### Possessives

<table>
<thead>
<tr>
<th>class</th>
<th>prefix</th>
<th>example</th>
<th>English gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>wa (u-)</td>
<td>muntu wangu</td>
<td>‘my person’</td>
</tr>
<tr>
<td>2.</td>
<td>ba(u-)</td>
<td>bantu bangu</td>
<td>‘my persons’</td>
</tr>
<tr>
<td>3.</td>
<td>wa(u-)</td>
<td>musamu wangu</td>
<td>‘my medicine’</td>
</tr>
<tr>
<td>4.</td>
<td>ya(u-)</td>
<td>misana yangu</td>
<td>‘my medicines’</td>
</tr>
<tr>
<td>5.</td>
<td>lya(li-a)</td>
<td>linyo lyangu</td>
<td>‘my tooth’</td>
</tr>
<tr>
<td>6.</td>
<td>a(a-a)</td>
<td>mano angu</td>
<td>‘my teeth’</td>
</tr>
<tr>
<td>7.</td>
<td>ca(ci-a)</td>
<td>cisote cangu</td>
<td>‘my hat’</td>
</tr>
<tr>
<td>8.</td>
<td>zya (zyi-a)</td>
<td>zyisote zyangu</td>
<td>‘my hats’</td>
</tr>
<tr>
<td>9.</td>
<td>ya(u-a)</td>
<td>nkuku yanga</td>
<td>‘my chickens’</td>
</tr>
<tr>
<td>10.</td>
<td>zya(zya-a)</td>
<td>nkuku zyangu</td>
<td>‘my chickens’</td>
</tr>
<tr>
<td>11.</td>
<td>lwa (lu-a)</td>
<td>luba lwanagu</td>
<td>‘my kraal’</td>
</tr>
<tr>
<td>12.</td>
<td>ka(ka-a)</td>
<td>kakkuku kangu</td>
<td>‘my small chicken’</td>
</tr>
<tr>
<td>13.</td>
<td>twa (tu-a)</td>
<td>tukukku twangu</td>
<td>‘my small chickens’</td>
</tr>
<tr>
<td>14.</td>
<td>bwa (bu-a)</td>
<td>bufwi bwakwe</td>
<td>‘his jealous’</td>
</tr>
<tr>
<td>15.</td>
<td>kwa (ku-a)</td>
<td>kulya kwakwe</td>
<td>‘his eating’</td>
</tr>
<tr>
<td>16.</td>
<td>a(a-a)</td>
<td>anganda akwe</td>
<td>‘at his home’</td>
</tr>
<tr>
<td>17.</td>
<td>kwa (bu-a)</td>
<td>kumungi kwabo</td>
<td>‘his home’</td>
</tr>
<tr>
<td>18.</td>
<td>mwa (muuna)</td>
<td>munganda mwabo</td>
<td>‘in his house’</td>
</tr>
</tbody>
</table>

97
### Adjectives (modifiers)

<table>
<thead>
<tr>
<th>class</th>
<th>prefix</th>
<th>example</th>
<th>English gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>mu</td>
<td>muntu mubotu</td>
<td>‘good person’</td>
</tr>
<tr>
<td>2</td>
<td>ba</td>
<td>bantu ba botu</td>
<td>‘good person’</td>
</tr>
<tr>
<td>3</td>
<td>mu</td>
<td>mubanga mupati</td>
<td>‘big mubanga tree’</td>
</tr>
<tr>
<td>4</td>
<td>mi-</td>
<td>mibanga mipati</td>
<td>‘big mubanga trees’</td>
</tr>
<tr>
<td>5</td>
<td>li</td>
<td>linyo lipati</td>
<td>‘big tooth’</td>
</tr>
<tr>
<td>6</td>
<td>ma-</td>
<td>mano mapati</td>
<td>‘big teeth’</td>
</tr>
<tr>
<td>7</td>
<td>ci-</td>
<td>cisote cipati</td>
<td>‘big hat’</td>
</tr>
<tr>
<td>8</td>
<td>zi</td>
<td>zisote zipati</td>
<td>‘big hats’</td>
</tr>
<tr>
<td>9</td>
<td>n-</td>
<td>nkuku mpati</td>
<td>‘big chicken’</td>
</tr>
<tr>
<td>10</td>
<td>n-</td>
<td>nkuku zipati</td>
<td>‘big chickens’</td>
</tr>
<tr>
<td>11</td>
<td>lu-</td>
<td>luba lupati</td>
<td>‘big kraal’</td>
</tr>
<tr>
<td>12</td>
<td>ka-</td>
<td>kakkuk tunini</td>
<td>‘small chickens’</td>
</tr>
<tr>
<td>13</td>
<td>tu</td>
<td>tukkuku bupati</td>
<td>‘exceed jealousy’</td>
</tr>
<tr>
<td>14</td>
<td>bu</td>
<td>bufwi bupati</td>
<td>‘exceeding jealousy’</td>
</tr>
<tr>
<td>15</td>
<td>ku</td>
<td>kubeleka kupati</td>
<td>‘hard working’</td>
</tr>
<tr>
<td>16</td>
<td>a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>ku</td>
<td>kumunzi kubotu</td>
<td>‘beautiful house’</td>
</tr>
<tr>
<td>18</td>
<td>mu</td>
<td>mungandu mubotu</td>
<td>‘beautiful house’</td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY


99


