

THE DETERMINER PHRASE SYNTAX OF IGIHA: A GENERATIVE SYNTAX-INTERFACES APPROACH

By

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DECLARATION

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ABSTRACT

The debate in generative linguistics on whether languages with no overt articles, including the Bantu languages, project a Determiner Phrase (DP), similarly to languages that have overt definite and indefinite articles (like ‘the’ and ‘a’ in English) informed the investigation on the igiHa NP/DP syntax conducted in this study. The main goal of this dissertation is thus to examine the evidence that igiHa, a Bantu language with no overt articles, projects a DP above NP in the syntactic representation of nominal phrases of igiHa. The study examines the igiHa complex noun phrase in providing evidence for postulating that the pre-prefix occurring in the inflection morphology of the lexical head noun, and the pre-prefix element in the inflectional morphology of different nominal modifiers is a functional category Determiner that heads a DP projection. For this purpose, the study examines the interpretative semantic, discourse-pragmatic, and information structural contrastive focus properties encoded by the (non-)occurrence of the Determiner pre-prefix in the inflectional morphology of the lexical head noun and the various nominal modifiers. The occurrence of the nominal modifiers in different syntactic positions with respect to the head noun is considered. A multi-perspective theoretical framework, exploring syntax interfaces properties was thus adopted for the study. This framework assumes the Minimalist Program principles of generative grammar, with particular focus on DP structure questions, extended to include perspectives from Cartography studies (Rizzi 1997). In addition, the theory of Definiteness and Specificity postulated by Lyons (1999), and information structural perspectives are incorporated in the framework.

The study presents arguments in support of the view that the pre-prefix in igiHa is a functional category determiner, specified for the semantic feature of specificity and the information structural feature of contrastive focus. This view is evidenced in the igiHa nominal phrase data by examples where the pre-prefix occurs obligatorily or optionally in the inflectional morphology of the lexical head noun and different nominal modifiers. It is argued that the determiner pre-prefix that occurs in the inflection morphology of nominal modifiers such as the adjective, the numeral, the possessive, the clausal relative, and some quantifiers and enumeratives is a D(eterminer) predicate functional category introducing a DP predication (DP_{Pred}) projection in the representation of these igiHa nominal phrases.

The study furthermore proposes that igiHa nominal modifiers such as the demonstrative and the anaphoric determiners **-áá**, **-á-á-ndi**, and **nya-** have an inherent feature of definiteness, whereas other modifiers, particularly the adjective, the numeral, the possessive, and the clausal relative are inherently neutral with respect to the semantic features of (in)definiteness and (non-)specificity. Some quantifiers, enumeratives, and interrogatives are inherently indefinite. However, the study argues that these nominal modifiers with a semantic feature of indefiniteness can under certain circumstances appear in definite environments.

In terms of the analyses proposed for the igiHa NP/DP constructions, the Determiner pre-prefix heads the DP projection, and the demonstrative and the anaphoric determiners occupy the specifier position. The Determiner pre-prefix dominates a Focus Phrase (FocP) projection in the context where it encodes the feature of contrastive focus.

OPSOMMING

Die debat in generatiewe linguistiek rakende die vraag of tale wat geen overte lidwoorde het nie, insluitende die Bantutale, 'n bepalerfrase ('Determiner Phrase') projekteer, soortgelyk aan tale wat 'n overte bepaalde lidwoord en onbepaalde lidwoord het (soos 'die' en 'n' in Afrikaans), het gedien as motivering vir hierdie studie. Die hoof doelstelling van hierdie proefskrif is aldus om die evidensie te ondersoek vir die beskouing dat igiHa, 'n Bantutaal sonder lidwoorde, 'n DP bo die NP projekteer in die sintaktiese representasie van nominale frases. Die studie ondersoek komplekse naamwoordfrases in igiHa in die daarstelling van evidensie vir die postulering dat die pre-prefiks wat in die infleksie morfologie van die kern leksikale naamwoord verskyn, en die pre-prefiks element in die infleksie morfologie van die verskillende naamwoordelike bepalers, 'n funksionele kategorie bepaler ('Determiner') is, wat as kern verskyn van 'n DP projeksie. Vir hierdie doel ondersoek die studie die interpretatiewe semantiese, diskoers-pragmatiese, en informasie strukturele kontrastiewe fokus eienskappe wat gekodeer word deur die (nie-) verskyning van die Bepaler pre-prefiks in die infleksie morfologie van die leksikale kern naamwoord en van die verskillende naamwoordelike bepalers. Die verskyning van die naamwoordelike bepalers in verskillende posisies met betrekking tot die kern leksikale naamwoord word in berekening gebring.

Die studie aanvaar 'n multi-perspektief teoretiese raamwerk. Hierdie raamwerk bevat die beginsels van die Minimalistiese Program van generatiewe grammatika, met spesifieke fokus op DP struktuur vraagstukke, uitgebrei om perspektiewe van die Kartografiese studies raamwerk (Rizzi 1997) in te sluit. Voorts is die teorie van Bepaaldheid en Spesifisiteit van Lyons (1999), asook informasie strukturele perspektiewe ingesluit in die raamwerk.

Die studie bied argumente ter ondersteuning aan vir die beskouing dat die pre-prefiks in igiHa 'n funksionele kategorie, Bepaler ('Determiner') is, wat gespesifiseer word vir die semantiese kenmerke van spesifisiteit en informasie strukturele kenmerk van kontrastiewe fokus. Hierdie beskouing word ondersteun deur data van die igiHa nominale frase waar die pre-prefiks opsioneel of verpligtend verskyn in die infleksie morfologie van die kern leksikale naamwoord en die verskillende naamwoordelike bepalers.

Daar word ge-argumenteer dat die bepaler pre-prefiks wat verskyn in die infleksie morfologie van naamwoordelike bepalers soos die adjektief, die telwoord, die possessief en die sinsrelatief, in sommige kwantifiseerders en enumeratiewe, ‘n bepaaldheids predikaat funksionele kategorie, D predikaat, is, wat ‘n DP predikaat projeksie invoer in die sintaktiese representasie van hierdie igiHa nominale frases.

Die studie argumenteer dat naamwoordelike bepalers in igiHa, soos die demonstratief, en die anaforiese bepalers **-áá**, **-a-a-ndi-**, en **nya-**, ‘n inherente kenmerk van bepaaldheid (‘definiteness’) het, terwyl ander bepalers, spesifiek die adjektief, die telwoord, die possessief, en die sinsrelatief, inherent neutraal is met betrekking tot die semantiese kenmerk van (on-)bepaaldheid en (nie-)spesifisiteit. Sommige kwantifiseerders enumeratiewe en vraagwoorde, is inherent onbepaald. Die studie toon egter aan dat hierdie naamwoordelike bepalers met ‘n semantiese kenmerk van onbepaaldheid, in sekere omstandighede, in bepaalde omgewings kan verskyn.

In terme van analyses wat voorgestel word vir die igiHa NP/DP konstruksies, verskyn die bepaaldheids pre-prefiks as kern van ‘n projeksie, en die demonstratiewe en anaforiese bepalers verskyn in die spesifiseerder posisie. Die Bepaler funksionele kategorie domineer ‘n Fokus frase (FocP) projeksie in omgewings waar dit die kenmerk van kontrastiewe fokus encodeer.

DEDICATION

I dedicate this study to my father Simon Bichwa (1951-2001) who oriented me on preserving Buha traditions and cultures which finally developed my interest in studying African languages. I also honor my mother Vaileth Sunzu for pushing me to go back to school when I tried to dodge school and started playing soccer after the death of my father, who passed away when I was still young (I was still in grade 7 of primary education).

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ABBREVIATIONS AND SYMBOLS

Abbreviations used to annotate illustrations

1PL	First person plural pronoun
1SG	First person singular pronoun
2PL	Second person plural pronoun
2SG	Second person singular pronoun
3PL	Third person plural pronoun
3SG	Third person singular pronoun
ABS	Absolute pronoun
ADJ	Adjective
AgrO	Object Agreement Prefix
AgrP	Agreement Phrase
AgrS	Subject Agreement Prefix
APPL	Applicative
ASP	Aspect
CAUS	Causative
CL	Noun class
COMP	Complementizer
CONJ	Conjunction
COP	Copula
D	Determiner
DEF	Definite
DEM	Demonstrative
DEM _{rt}	Demonstrative root
DIST	Distal (deixis)
DP	Determiner Phrase
DP	Determiner phrase
DP _{Pred}	Determiner Phrase Predicate
D _{Pred}	Determiner Predicate
EMPH	Emphatic (pronoun)
FOC	Focus

FocP	Focus Phrase
FUT	Future tense
FV	Final vowel
GEN	Genitive morpheme
IMP	Imperative
INF	Infinitive
IS	Information Structure
LDCop	Locative demonstrative Copulative
LOC	Locative
MEDIAL	Medial (deixis)
N	Noun
N	Noun
NEG	Negative
NP	Noun Phrase
PART	Partitive
PAST	Past tense
PERF	Perfective aspect
PN	Proper Name
POSS	Possessive
PP	Prepositional Phrase
Ppfx	Pre-prefix
PREP	Preposition
PRES	Present tense
PROG	Progressive aspect
PROX	Proximal (deixis)
PRSTV	Persistent aspect
Q	Question word
QP	Quantifier Phrase
QUANT	Quantifier
QUANTrt	Quantifier root
RC	Relative Clause
REFL	Reflexive

REL	Relative
SBJV	Subjunctive
Spec	Specifier
TP	Tense Phrase

SYMBOLS USED IN THE ILLUSTRATIONS

∅	:a null or zero morpheme
*	:ungrammatical structure
?	:questionable syntactic construction
^	:raising and falling tone
`	:falling tone
ˆ	:raising tone

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

The central goal of this study is to examine the question of how the (non-)occurrence of the pre-prefix in the inflection of nouns and some nominal modifiers in the igiHa NP/DP is related to semantic-pragmatic interpretations such as (in-)definiteness and (non-)specificity, and information structural discourse properties such as topic, focus and/or contrast. To attain this goal the study assumes the broad Generative syntax framework, including the Minimalist Program, and specifically Abney's (1987) DP Hypothesis, which is invoked in positing phrase structural representations for the igiHa noun phrase. It employs Rizzi's (1997) Cartographic Studies perspectives, in relating generative syntax, including Minimalism, to information structure. The investigation of (in-)definiteness and (non-)specific interpretations of the igiHa DP invokes the theory of Definiteness and Specificity advocated by Lyons (1999). The investigation of the igiHa noun Phrase more invokes discourse-pragmatic interpretations relating to topic, focus, and contrast with reference to Lambrecht's (1996) information structural framework and views of Aboh et al. (2010), and Repp's (2010, 2016) notions of implicit/explicit alternative (set).

This chapter contains ten sections. Section 1.1 is the introduction to the chapter, section 1.2 presents the background to the study, and section 1.3 discusses the rationale of the study. Sections 1.4 gives the problem statement, 1.5 describes the objectives of the study, and section 1.6 outlines the research questions. Section 1.7 introduces the theoretical points of departure. Section 1.8 discusses the research methodology, and section 1.9 provides brief information concerning the igiHa language and its people. Section 10 outlines the organization of the dissertation.

1.2 Background to the study

Within generative syntax research, the issues concerning the postulation of the Determiner category, hence the postulation of the Determiner Phrase projection for languages like African languages that lack articles (corresponding to, for instance, the definite article 'the' and the indefinite article 'a' in English) has been a contested issue in research. Arguments both in

support of, and against the postulation of a category Determiner in terms of the DP Hypothesis have been proposed by linguists regarding the contested view of the existence of the category Determiner in article-less languages such as igiHa, and other related African languages, in general.

Considering the DP system of languages that lack articles, some linguists have argued that languages that lack overt articles, such as the African languages, do not project DPs, but rather NPs (Lusekelo, 2013; Ndomba, 2006; Rugemalira, 2007). With reference to examples from several Bantu languages, including Mashami, Kiswahili, igiHa, Kisafwa, Kinyinha, Kinyakyusa, Kisukuma, and Runyambo, Rugemalira (2007) contends that nouns in Bantu languages are analyzed as NPs, rather than DPs because they lack overt articles. Rugemalira (2007) and Lusekelo (2013) further maintain that in Kiswahili, for example, nominal modifiers (in some studies referred to as determiners) appear mostly post-nominally. According to these scholars, in only a few cases do determiners in Kiswahili appear pre-nominally (Lusekelo, 2013; Rugemalira, 2007).

With regard to the universality of the DP projection, it has been argued in some previous research studies that languages that lack articles project DPs above NPs (Carstens, 1991, 1993, 1997 & 2005; Chen, 2004; Progovač, 1998; Veseloviská, 2014; Stanković, 2014). For example, Carstens (1991) argues that Kiswahili nouns project a DP with a null determiner since it lacks an article that was claimed to be the element that represents a grammatical functional category determiner. However, igiHa is a language with a pre-prefix, in contrast to Kiswahili, which exhibits no pre-prefix. This property constitutes part of the rationale for conducting this study which has, among others, the objective to examine whether the igiHa pre-prefix provides evidence to be considered a functional category determiner.

Some African languages studies have argued that that demonstratives, subject agreement prefixes, noun class pre-prefixes, and object agreement prefixes encode definiteness, which is linked to the anaphoric function of the determiner (Allen, 2014; Alnet, 2009; Gambarage, 2013; Iorio, 2011 & 2015; Hyman & Katamba, 1993; Kimambo, 2018; Mojapelo, 2007; Ndomba, 2017; Kaji, 2009; Petzell, 2003; Riedel, 2009; Visser, 2008). It is argued, for example, that the pre-prefix encodes definiteness and specificity in Runyankore-Rukiga (Allen, 2014), Kagulu (Petzell, 2003), isiXhosa (Visser, 2008), and Luganda (Hyman & Katamba, 1993). On the other

hand, Gambarage (2019) asserts that the pre-prefix in Nata and other Bantu languages is not associated with definiteness and specificity. With reference to data from languages such as Luganda, Runyankore-Rukiga, Xhosa, Kinande, Zulu, Bemba, Haya, and Dzamba, Gambarage disagrees with the widely held view that the pre-prefix in those languages is related to the semantic features of definiteness and specificity. The diverse data and findings from research regarding evidence for positing a category determiner that represents the semantic features of definiteness and/or specificity for Bantu languages, emphasize the need for further investigation of this linguistic phenomenon in other Bantu languages, including for igiHa.

Another aspect investigated in this study concerns the question of the structural representation and discourse-pragmatic inferences associated with nominal expressions in igiHa that lack a lexical head, which Visser (1984) postulates for isiXhosa, as a phonological empty pronominal *pro*. According to Visser (1984), the *pro* head is realized in a DP dominating an NP containing a head noun which is covert in phonological representation. In this article, Visser opposes the traditional notion that the verbal subjectival and objectival (or clitic) concords are pronouns in the context where they occur without a co-referential noun phrase subject or object, respectively. Studies in Bantu languages that exhibit a pre-prefix show that the nominal modifiers that occur in the DP containing a phonologically empty lexical head noun, i.e., a *pro* head, exhibit an obligatory pre-prefix (Allen, 2014; Visser, 2008). Allen (2014) and Visser (2008) further postulate that the pre-prefix occurring in the morphology of nominal modifiers in a DP headed by a *pro* category manifests features of definiteness, specificity, and contrastive focus in Runyankore-Rukiga and Xhosa, respectively. The views from other studies which claim that the pre-prefix is not associated with features of definiteness and/or specificity form part of the rationale for this study having the goal to examine this phenomenon in the igiHa DP syntax.

To address the problem of the interaction between the (non-)occurrence of the nominal pre-prefix element in igiHa, its interpretative features of (in)definiteness and (non-)specificity, and its categorial status as a grammatical functional category determiner, the Minimalist Program of the Generative Syntax (Chomsky, 1995), as expounded in Hornstein, Nunes and Grohmann (2005) and van Gelderen (2013), Alexiadou, Haegeman and Stavrou (2008), among others, is assumed for this study. In addition, the study adopts in its framework views from Abney's (1987) Determiner Phrase (DP) Hypothesis, a widely researched hypothesis in generative syntax.

The views on Cartographic studies are related to Information structure, as expounded in Lambrecht (1996), and Repp (2010, 2016), in invoking the syntax-information structure interface. With regard to examining definiteness and specificity, this dissertation assumes in particular Lyons's (1999) semantic theory on definiteness and specificity.

From the perspective of syntax interfaces view, this study investigates the evidence for the postulation of the nominal pre-prefix as a grammatical functional category determiner in igiHa. It also examines the morpho-syntactic contexts in which the pre-prefix is (optionally) realized in igiHa and explores complex nominal constructions in igiHa, including the range of nominal modifiers, examined in Chapters Four, Five, and Six, in which definiteness, specificity, and contrastive focus are realized. Given that igiHa is an article-less language, like other Bantu languages, the dissertation examines how article-less noun phrases in igiHa project a DP above NP in its syntax.

1.3 Rationale for the study

The proposed study is motivated in a three-fold way. Firstly, igiHa, the language on which the research is conducted, is under-researched regarding both descriptive and theoretical analysis in morpho-syntactic study. The few existing publications on igiHa are either in the field of phonology or descriptive grammar (see Harjula, 2006; Bichwa, 2016 & 2018; Bichwa & Kombe, 2018; Harjula, 2004; Nakagawa, 1992). Thus, this study aims to contribute to theory-based research of the igiHa morpho-syntax of nominal phrases. Secondly, the proposed study (being conceptualized in the current debate within generative grammar research on whether article-less languages project a DP, rather than an NP), aims to contribute to more insight to unresolved issues that have arisen from this debate concerning the DP hypothesis. Thirdly, this dissertation aims to contribute to syntax-interface studies of languages with no overt articles.

1.4 Statement of the problem

This dissertation investigates the question of how the igiHa complex NP constitutes evidence for positing a functional category determiner, hence a Determiner Phrase projection. This evidence is specifically associated with the (non-)occurrence of the pre-prefix element in the inflectional morphology of the lexical head noun and nominal modifiers in certain syntactic environments. The study will furthermore investigate the question of how a syntax- interfaces view can be

invoked, taking into account the semantic features of (in)definiteness and (non-)specificity, and the information structural properties of contrastive focus of igiHa NPs/DPs associated with the (non-)occurrence of the pre-prefix in the inflection of the lexical head noun and other nominal modifiers in postnominal and prenominal positions.

1.5 Research objectives

This study aims to investigate the Determiner Phrase syntax of igiHa with respect to its morpho-syntactic structure and the semantic-pragmatic interpretations associated with the (non-)occurrence of the pre-prefix element on the lexical head noun or other nominal modifiers. To attain this goal, the specific objectives of this dissertation are to:

- (i) Identify the morpho-syntactic properties of the igiHa pre-prefix that constitute evidence for the postulation of this element as a functional category determiner in terms of the DP Hypothesis;
- (ii) Examine how the (non-)occurrence of the lexical head in a complex DP interacts and is interdependent with, the agreement morpheme syncretic to the noun class pre-prefix in the inflectional agreement of the different nominal modifiers;
- (iii) Examine how the interpretative semantic, discourse-pragmatic, and information structural properties associated with the agreement morpheme syncretic to the pre-prefix in the inflectional morphology of the various nominal modifiers, occurring in different syntactic positions, interact with the grammatical features of definiteness and/or specificity that can be specified for this agreement morpheme in terms of postulating it as a grammatical functional category determiner. Thus, the occurrence of nominal modifiers in (i) the pre-nominal and post-nominal positions, respectively, are examined, and (ii) NPs in which an overt lexical head is absent;
- (iv) Investigate how the interdependence between the (non-)occurrence of the agreement morpheme syncretic to the noun pre-prefix in the inflectional morphology of nominal modifiers, and the (in)definiteness and (non-)specificity interpretation of the DP, correlate with the (non-)occurrence of a preceding demonstrative;

- (v) Examine the properties regarding the (non-)co-occurrence of the pre-prefix of the noun and the agreement morpheme (syncretic to the pre-prefix) in the inflectional morphology of certain nominal modifiers, when preceded by a demonstrative, in contrast to when the demonstrative follows them;
- (vi) Identify the interdependence of the noun pre-prefix and the agreement morpheme syncretic with the pre-prefix in the inflectional morphology of some nominal modifiers (e.g. adjectives, some numerals) in expressing definiteness and/or specificity features that can occur as feature specifications of a grammatical functional category determiner, and the inherent lexical-semantic features of these nominal modifiers;
- (vii) Identify the structure of the left-periphery syntactic cartography of the NP/DP in igiHa, taking into account the interpretative properties associated with the (non-)occurrence of the noun pre-prefix and the agreement morpheme, syncretic with the pre-prefix in the inflectional morphology of some nominal modifiers, concerning (i) the grammatical feature specification of definiteness and specificity, and (ii) semantic-pragmatic definiteness, specificity, and information structural interpretation, in particular focus.

1.6 Research questions

The dissertation aims to address the following interdependent and interrelated questions concerning the properties of (complex) noun phrases with nominal modifiers in igiHa:

- (i) Which instances in the morpho-syntactic of the noun class pre-prefix (if any), constitute evidence for postulating this element as a grammatical functional category determiner in terms of the Minimalist generative syntax view of the DP Hypothesis?
- (ii) How does the property of the (non-)occurrence of a lexical head noun in a complex noun phrase interact, and is interdependent with, the agreement morpheme syncretic to the pre-prefix in the inflectional agreement of the different nominal modifiers?
- (iii) How do the interpretative semantic, discourse-pragmatic, and information structural properties associated with the agreement morpheme syncretic to the pre-prefix in the inflectional morphology of different nominal modifiers in different syntactic positions interact with the grammatical features of definiteness and/or specificity that can be

specified for this agreement morpheme in terms of postulating it as a grammatical functional category determiner? (The occurrence of nominal modifiers in (i) the pre-nominal and post-nominal positions, respectively, is examined, and (ii) NPs in which an overt lexical head is absent.)

- (iv) How do the interdependence between the (non-)occurrence of the agreement morpheme syncretic to the noun pre-prefix in the inflectional morphology of nominal modifiers, and the (in)definiteness and (non-)specificity interpretation of the DP, correlate with the (non-)occurrence of a preceding demonstrative?
- (v) How can properties concerning the (non-)co-occurrence of the pre-prefix of the noun and the agreement morpheme (syncretic to the pre-prefix) in the inflectional morphology of certain nominal modifiers when preceded by a demonstrative (in contrast to when the demonstrative follows it), be explained?
- (vi) What is the nature of the interdependence of the noun pre-prefix and the agreement morpheme syncretic with the pre-prefix in the inflectional morphology of some nominal modifiers (e.g. adjectives, some numerals) in denoting definiteness and/or specificity that can be represented as feature specifications of a grammatical functional category determiner, and the inherent lexical-semantic features of the different nominal modifiers?
- (vii) What is the structure of the left-periphery syntactic cartography of the NP/DP in igiHa, taking into account the interpretative properties associated with the (non-)occurrence of the noun pre-prefix and the agreement morpheme, syncretic with the pre-prefix in the inflectional morphology of some nominal modifiers, concerning (i) the grammatical feature specification of definiteness and specificity, and (ii) semantic-pragmatic definiteness, specificity, and information structural interpretation, in particular focus?

1.7 Theoretical points of departure

This study on the Determiner Phrase (DP) syntax of igiHa has as core question how the morpho-syntactic properties of the (non-)occurrence of the noun pre-prefix and the agreement morpheme syncretic to the pre-prefix in the inflectional morphology of some nominal modifiers, and the

associated semantic and discourse-pragmatic features of (complex) noun phrases necessitate a syntax-interfaces theoretical framework. Thus, the framework adopted in this dissertation, assuming a broad generative perspective, necessitates the utilization of four distinct, but mutually interacting theoretical perspectives, comprising of (a) Minimalist syntax, with a focus on the DP Hypothesis, (b) Cartographic studies, (c) Nominal reference studies (i.e. the study of different kinds of referring expressions and their interpretations of (in)definiteness and (non-)specificity, and (d) information structure studies. Each of these linguistic fields is briefly discussed below regarding their key properties. Given the research questions outlined above concerning the igiHa Determiner Phrase (DP), the syntax-interfaces theoretical framework adopted for this study provides a more comprehensive and adequate account of the NP/DP syntax of igiHa. In particular, the nature of the morpho-syntactic examination of the igiHa NP/DP, taking into account the discourse-related (in)definiteness, (non-)specificity, and information structural (focus) interpretation, as stated in the research questions, informs the syntax-interfaces approach adopted in this dissertation.

1.7.1 The Minimalist Program

The Minimalist Program (MP) of generative syntax, initially postulated by Chomsky (1995), developed from the Principles-and-Parameters theory and the earlier model of Government-and-Binding (GB) theory. The generative approach postulates that the human linguistic capacities emerge from environmental inputs and principles of Universal Grammar (Carnie, 2007; Hornstein et al, 2005; Radford, 1997 & 2004b, among others). Minimalism realizes this view by assuming the Principles and Parameters–architecture as the basis of the generative syntax approach.

1.7.2 The Determiner Phrase (DP)

The DP Hypothesis, as posited by Abney (1987), posits that nouns project higher functional categories which head their phrases called Determiner Phrases (DPs). The items which occupy this position of the D were constrained in earlier research to articles for English, both definite ('the') and indefinite ('a'). In this view, articles head the projection referred to as the DP projection. Longobardi (1994) states that the DP Hypothesis considers the 'whole nominal

expression' agreeing with the Determiner Phrase/Noun Phrase as 'the complement of the head D'.

Some linguists view the DP Hypothesis as more credible than the NP Hypothesis. The DP Hypothesis is advanced for its conceptual parallelism with the structure of clauses in the CP, IP, and VP projections (Horrocks & Stavrou, 1987; Progovač, 1998). The view is advanced by some linguists that all languages have the same underlying phrase structure, suggests that DPs should be posited to project both in article-less languages as well as languages with articles (Progovač, 1998; Stanković, 2014; Veselovska, 2014)

Rizzi and Cinque (2016) assert that categories such as copulas, complementizers, and determiners are considered to be in the grammatical functional category group. As a grammatical functional element, a determiner encodes definiteness and/or specificity. In contemporary syntactic study, the determiner is generally considered as a functional head which occurs in the specifier position of the lexical noun which can be optionally *pro* (Borer, 2005 & 2013; Cruschina, 2011; Giusti, 1997; Rizzi & Cinque, 2016). Regarding this perspective, Rizzi and Cinque (2016) assume that the determiner encompasses both free and bound morphemes. Free entities may be elements like English articles and possessives while bound morphemes can be inflectional affixes such as prefixes and/or roots. Therefore, in this study, determiners are considered from this perspective.

1.7.3 Cartography

In addition to the Minimalist Program syntax perspective, this study assumes the Cartographic studies framework of generative grammar, as postulated by Rizzi (1997) and subsequent studies. Cinque (2002) asserts that Cartographic studies posit that all languages share the same functional categories and the same principles of phrase and clause composition, although they may differ in the movements they admit and in the projections they overtly realize. The rationale for incorporating Cartography in the framework employed in this dissertation is to examine the availability of functional projections in DPs, and the discourse-pragmatic properties of information structure, giving the contrastive focus interpretations of NPs/DPs in *igiHa* relating to the occurrence of the pre-prefix element in the agreement inflection of certain nominal modifiers.

It was pointed out above, that with regard to the correlation between Minimalism and Cartography, Rizzi and Cinque (2016) assert that both theories are subsumed within the broad generative syntax theory. Rizzi and Cinque (2016) posit that while minimalism focuses on minimizing the power of generating syntactic structures, Cartography focuses on the refinement of configurations generated in terms of Minimalism.

1.7.4 Definiteness and specificity

Lyons (1999) posits four key features for defining the notions of (in)definiteness, namely, familiarity, identifiability, uniqueness, and inclusiveness. Concerning the definition of (in)definiteness in terms of familiarity, Lyons (1999) argues that the referent should be familiar to both interlocutors for the NP to be definite. The NP is definite in the context where the entity referred to is known by the discourse participants. In contrast, the NP is indefinite when the speaker does not intend to indicate such a collective familiarity to the hearer. In respect to the notion of identifiability, Lyons asserts that the NP is definite when the hearer can pinpoint the entity being referred to. The NP is indefinite when the hearer cannot identify the referent. In terms of uniqueness, Lyons (1999) states that the NP is considered definite when the hearer cannot automatically identify the referent, but can uniquely associate one entity as satisfying the description used for the noun phrase. He maintains that the NP encodes the feature of indefiniteness when the speaker only can associate a referent that satisfies the description of the referent. Concerning plural and mass NPs, Lyons states that an NP obtains definiteness when the reference is to the totality of objects or mass in the situation which fulfills the descriptions. A related concept explored by Lyons (1999) is specificity. He asserts that specificity is associated with the speaker's knowledge of the identity of the referent. Non-specific referents, on the other hand, are those for which the speaker does not intend the speaker to identify it. Lyons points out that a specificity marker can be used with definite or indefinite nouns. Lyons's (1999) theory of definiteness and specificity is employed in this study to explore how the languages with no overt article, such as *igiHa*, encode the notions of definiteness and specificity.

1.7.5 Information structure

This study assumes perspectives from Lambrecht's (1996) information structure theory and the related views of Aboh *et al.* (2010) and Repp (2010, 2016). The information structure properties

examined relate to Cartography, which posits as structural representations are the Topic Phrase and Focus Phrase. Lambrecht (1996) considers Information Structure as displaying a strictly linguistic aspect, with basic notions of presupposition, assertion, topic, and focus playing a significant role in determining formal realizations, along with general conversational and extra-grammatical principles of the Gricean type. Within the framework of information structure, Lambrecht (1996) concentrates on three notions, namely discourse referents, topic, and focus. A range of definitions exists regarding the notions of topic and focus (see section 2.4.7). However, it is generally assumed in linguistic research that topic relates to old information and focus relates to new information in discourse. The notion of focus, similarly, has a wide range of definitions (Gundel & Fretheim, 2006; Krifka, 2008; Lambrecht, 1996; Repp, 2010, 2016; Song, 2017). It will be further discussed in Chapter Two (section 2.4.7), that this study assumes the interpretation of focus that involves alternatives, contrastive, or selective, as asserted by Krifka (2008) and Repp (2010, 2016).

1.8 Research methodology

The research conducted in this dissertation on the Determiner Phrase syntax of igiHa employed the research methodology generally employed in formal theoretical linguistics for the investigation of morpho-syntactic phenomena to provide evidence from empirical data from a language in support of theoretical proposals regarding its morpho-syntactic structure (Schütze, 2016). This methodology entails, in the case of the research undertaken in this dissertation, five distinct phases relating to (i) study of the different views in the formal linguistic literature on the Noun Phrase/Determiner Phrase in order to establish the range of linguistic arguments for postulating the category Determiner for igiHa, and the African languages in general, that lack articles (such as the English *the*, *a*), (ii) study of the linguistic literature on the morpho-syntactic encoding of definiteness and specificity and information structural concepts of contrastive and identificational focus, as discourse-pragmatic properties of Noun Phrases, (iii) systematic investigation of the morpho-syntactic environments in which the igiHa pre-prefix is (not) permitted, and in which the agreement morpheme (syncretic with the noun pre-prefix) in the inflectional morphology of some nominal modifiers (a) must be present, or (b) must be omitted (see research questions above), (iv) systematic investigation of the interpretation of (complex) noun phrases with respect to discourse-pragmatic and information structural properties of

(in)definiteness, (non-)specificity and contrastive focus, and (v) systematic discussion of a syntax-interfaces account of the Determiner Phrase (DP) left periphery architecture concerning the syntactization of discourse-pragmatic properties of the igiHa noun phrase relating to the noun pre-prefix and the agreement morpheme (syncretic with the pre-prefix) in the inflectional morphology of some of the nominal modifiers.

The linguistic judgments concerning the grammaticality and acceptability of igiHa sentences demonstrating particular properties were verified in terms of a three-fold method of data collection, namely introspection, informal consultations with igiHa speakers, and textual review. In a generative grammar research, **Alessandro and Oostendorp (2017)** advocate the use of different data sources, which, if non-contradictory, can offer more concrete evidence for linguistic investigation.

To the great extent, I invoked my introspective linguistic intuitions and judgments about the grammaticality and acceptability of sentences, as a native speaker of igiHa. Newmeyer (2020) states that despite its criticism, the introspective method is still widely accepted in formal linguistics, particularly in generative syntax. With reference to Schütze (2006), Newmeyer (2020) asserts that introspective data offer linguistic ingredients that are difficult to obtain from spontaneous speech or the recorded corpora. Similarly, Devitt (2006) asserts that introspective data are relevant in generative syntax because they are collected from the speaker's cognitive state of linguistic competence which he calls the 'voice of competence'. In exploring the notion of introspection, Devitt (2006) refers to the studies of Pateman (1987), Chomsky (1980, 1986), Fodor (1981), Graves et al. (1973), and Pylyshyn (1984) who express the view that intuitions can be used for making grammatical judgments since linguistic structures are innately represented in the native speaker's language faculty. Given the assumptions made by these scholars, Devitt (2006) further asserts that introspections can reliably be invoked by a native speaker linguist to offer grammatical facts and make grammatical judgments. Devitt (2010) argues that linguistic intuitions provide sufficient grammatical evidence because it is generated from the speaker's linguistic competence.

I also consulted informally 6-8 native speakers of igiHa on their judgments about the interpretation and (non-)acceptability of sentences in the lines of Featherston (2007), who argues for introspective data to be attested with several informants. To make this method more effective,

I used Matthewson's (2004) technique of elicitation which involved direct and spontaneous elicitations. In direct elicitation, I asked my consultants about their judgments about grammaticality and acceptability of igiHa constructions which I generated intuitively. For instance, I asked them whether it was grammatical for the determiner pre-prefix to occur in the new and old discourses. In this regard, I asked my consultants to listen to a certain discourse of use and give an appropriate response. In spontaneous elicitation, I asked speakers to give their narrations in which I picked a few DPs I found relevant in my study.

Regarding textual review, I managed to obtain two portions of the Bible that have been translated in igiHa, although the language under studied is underdocumented. These parts of the igiHa Bible translated in (2019) by the Bible Society of Tanzania offered few secondary data for this study. I selected some relevant verses and analyzed them carefully concerning their context of use.

1.9 Ethical consideration

The data used in this dissertation were predominantly gathered through the introspective method. I discussed my linguistic intuitions and judgments informally with 6-8, igiHa native speakers about the acceptability of sentences. Although this sort of consultation was conducted informally, I appropriately acknowledged them in the study in accordance with standard conventions in linguistics research of this nature. The study thus entailed a very low/no risk, regarding ethical clearance requirements.

1.10 The structure of this dissertation

The dissertation comprises seven chapters. Chapter One presents the introduction to the study, Chapter Two presents the theoretical framework, and Chapter Three reviews relevant previous studies on the Noun Phrase/Determiner Phrase. The three core chapters investigate the morph-syntactic structure and semantic-pragmatic interpretations of the igiHa nominal domain. The last chapter concludes the study.

Chapter One presents the introduction to this dissertation. It describes the background to the study, the rationale, and the statement of the research problem. The other sections included in this chapter relate to the research objectives, research questions, the theoretical point of

departure, research methodology, and the ethical considerations concerning this study. Chapter Two presents the theoretical framework assumed in this study. It presents a multi-perspective theoretical framework that assumes a syntax-interfaces approach. Chapter Three presents the literature review of certain selected studies on NP/DP structure. Both typological and theoretical studies are reviewed in this chapter. Chapter Four examines the morpho-syntactic structure and the semantic-pragmatic interpretation of the igiHa DPs containing the definite and specific nominal modifiers namely, the demonstrative and the anaphoric determiners **-aa**, **-a-a-ndi**, and **nya-**. Chapter Five examines the morpho-syntactic structure and the semantic interpretation of the igiHa DPs containing the nominal modifiers that are inherently neutral regarding definiteness, including the adjective, the numeral, the clausal relative, and the possessive, as they occur with(out) the determiner pre-prefix. Chapter Six examines the quantifier, enumerative, and interrogative nominal modifiers in igiHa with regard to their semantic and morpho-syntax properties as these relate to (in)definiteness and (non-)specificity. Chapter Seven concludes the dissertation by summarizing the main findings of the study and indicating some questions for further research.

1.11 The igiHa language and its people

This study, as discussed in the preceding sections investigates the syntax of the Noun Phrase/Determiner Phrase (DP) in igiHa, which is classified by Guthrie (1971) as (D66) of group D, which includes other languages such as Kivinza (D67), Kihangaza (D65), Kisubi (D64), Kifuliuro (D63), Kirundi (D62), and Kinyarwanda (D61). The recent classification of Bantu languages by Maho (2009) classifies group D as JD, where, igiHa is identified as JD66. Regarding its dialectal status, Kimenyi (1978) considers igiHa, Kinyarwanda, and Kirundi, as dialects of the same language. Bukuru (2003) asserts that igiHa, Kinyarwanda, Kirundi, Kihangaza, and Kisubi exhibit an extensive degree of grammatical similarities to the extent of approximately 75-85%. He states that these five languages are dialects of one language. However, **Abaha** (the igiHa people themselves), consider their language to be different from Kirundi, Kinyarwanda, Kihangaza, or Kisubi.

There is a scarcity of linguistic studies on the igiHa language. To my knowledge, the only comprehensive work is devoted to the description of the igiHa grammar by Harjula (2004). Harjula (2004) states that the structure of igiHa nouns constitutes the pre-prefix (the augment),

the noun class prefix, and the noun stem, thus realizing the structure Pre-prefix-Noun Class-Stem. This feature is apparent in many other Bantu languages.

The pre-prefix is viewed as the element occurring in the initial inflection morphology of nominal elements in some Bantu languages in the shape of either a vowel only, consonant-vowel, or a vowel-consonant-vowel. Nurse, Hinnebusch and Philipson (1993) reports that 60% of the Eastern Bantu languages exhibit the pre-prefix in their nominal morphology studies. In some literature studies, the pre-prefix is referred to as the augment or specifier (c.f. Petzell & Kühl, 2017). In the current study, the term pre-prefix is used, rather than the term augment. I adopt the term pre-prefix, rather than the term initial vowel, because it does not necessarily occur as a vowel in all Bantu languages. In some languages, the pre-prefix occurs in the form of a consonant-vowel and others in the form of vowel-consonant. According to De Blois (1970), igiHa belongs to the group of languages with a V-structure pre-prefix. In IgiHa, the pre-prefix takes the form of a vowel [**a-; i-; u-**], thus corresponding to the vowel of the noun prefix.

According to Harjula (2004), the pre-prefix in igiHa is prefixed to common nouns, infinitives, independents i.e., nominalized relatives, relative pronouns, and the interrogative stem **-ki** ‘what’ and the quantifier stem **-ndi** ‘other’. She maintains that the pre-prefix occurs only when the noun is in the initial position of the sentence and is absent when the noun follows the negative. However, the current study will demonstrate that the pre-prefix can occur in obligatory and in optional environments (see Chapters Four, Five, and Six of this study). Harjula (2004) described only the occurrences of the pre-prefix in the obligatory settings.

With respect to the nominal domain, Harjula (2004) discusses the noun phrase in igiHa comprising of the noun and its modifiers. She maintains that nominal modifiers that constitute the nominal domain include the pronoun, the numeral, the adjective, the possessive, and the relative/participial clause. In her description, she identifies nominal modifiers such as demonstratives, quantifiers, interrogatives, and enumeratives, as members in the category of pronouns. Since this study is conducted within the Generative Framework, I use terms and word categories that differ from those used in Harjula's (2004) description. The nominal modifiers that constitute the nominal phrase as I view it in this study include the demonstrative and anaphoric

determiners (Chapter Four), the adjective, the numeral, the clausal relative, and the possessive (Chapter Five), and the quantifier, the enumerative, and the interrogative (Chapter Six).

CHAPTER TWO

A MULTI-PERSPECTIVE THEORETICAL FRAMEWORK WITH SYNTAX-INTERFACES

2.1 Introduction

The central aim of this chapter is to present a multi-perspective theoretical framework for the dissertation. Since this dissertation aims at presenting a theoretical account of the DP syntax of igiHa, it selects to adopt a broad generative perspective, that involves the interaction of syntactic theory and its interfaces with other linguistic fields such as morphology, semantics, and discourse-pragmatics. Thus, the principal goal of this chapter is to explore viewpoints from research concerning syntax interfaces. The multi-perspective framework outlined in the current chapter invokes the Minimalist framework of Chomsky (1995) and some subsequent works, including, in particular, the earlier DP-Hypothesis postulated by Abney (1987), the Cartographic studies approach of Rizzi (1997), the theory of Definiteness and Specificity of Lyons (1999), and the theory of Information Structure advocated by Lambrecht (1996) and related proposals in studies of Krifka (2008) and Repp (2010, 2016) among others. Thus, this chapter presents theoretical perspectives from linguistic studies employing these theories to the investigation of the DP syntax of the igiHa, including, in particular, the functional category Determiner, which can be specified for the semantic features of (in)definiteness, (non-)specificity. In addition, some views on the discourse-pragmatic feature of contrastive focus will be explored.

This chapter, therefore, presents a review of selected previous studies of the multi-perspective theoretical framework of syntax interfaces. Since studies on the theory of syntax-interfaces are wide-ranging, it is not possible to present a complete review of all research. Consequently, this chapter discusses some selected studies that are relevant to the analysis of the DP syntax of igiHa that will be investigated in Chapters Four, Five, and Six.

Concerning its organization, this chapter has the following sections. Section 2.2 presents a general discussion on syntax interfaces and section 2.3 presents a review of some studies on the properties of the functional category Determiner. Section 2.4 discusses key aspects of the Minimalist Program, Cartography, Principles of Definiteness and Specificity, and Information

Structure, areas that constitute the multi-perspective approach adopted for this study. Section 3.5 presents a summary of the main views discussed in this chapter.

2.2 Views from syntax-interfaces

This section aims to discuss selected views from previous research on generative syntax and its interactions with other components of grammar, including morphology, semantics, and pragmatics. It outlines the key issues that arise in adopting a multi-perspective framework that advocates for the interaction and interdependency of these linguistic sub-fields.

In contemporary syntactic studies, the earlier notion of syntactic autonomy has been largely abandoned. The existing prevailing view in recent syntactic studies is that syntax is connected to other linguistic components, representing knowledge. This view is advanced by Mycock (2015), among others, who argues that recent research on syntax invokes the notion of interactions among linguistic components. In exploring the syntax interfaces, Kiss and Alexiadou (2015) present views on how syntax interacts with other components of linguistics, including the lexicon, phonology, morphology, semantics, and pragmatics. Similarly, Harley (2015) explores the interaction between syntax and phonology, Mycock (2015) discusses the morphology-syntax interface, Lechner (2015) examines the syntax-semantic interface, and Tsoulas (2015) examines the syntax-pragmatic inter-dependency.

Mycock (2015), states that there are two debates on the relationship between syntax and morphology. According to her, some researchers consider syntax to encompass morphology, while others subscribe to the lexicalist hypothesis that considers morphology as an autonomous component of grammar. In regard to the view that syntax subsumes morphology, Mycock (2015) argues that the notion of noun incorporation, which she claims to be manifested in many languages, is the earliest syntactic operation that involves all morphological processes. Similar to Chomsky (1981) and Travis (1984), Mycock (2015) assumes that complex words are formed by head movement which is a syntactic operation restricted by head movement constraint, the empty category principle, and/or relativized minimality. Mycock (2015) states that researchers who advance the noun incorporation hypothesis contend that noun incorporation as a means of complex word formation is analyzed in terms of the conventional principles of derivational syntax. Thus, syntax generates constructions either below or above word level. Mycock (2015) posits that by contrast, the lexicalist hypothesis views morphology as an autonomous component

of grammar. She maintains that researchers advancing this approach are categorized into two groups, labeled weak lexicalists and strong lexicalists. Weak lexicalists posit that derivations apply in the lexicon, while inflections are what remain relevant to syntax. She states that, by contrast, strong lexicalists associate inflection and derivation with the recurring arrangement of guidelines of affixation relative to each other within the lexicon. From this argument, researchers advancing the lexicalist hypothesis isolate morphology from syntax.

Concerning the process of noun incorporation, Mycock (2015) points out that it originates from a combination of the verb and one of the associated arguments. With reference to Sadock (1991), who advances a lexicalist model of grammar in terms of which syntax, morphology, and semantics are separate components, Mycock (2015) states that some researchers who support the lexicalist hypothesis, assume noun incorporation to be lexical, rather than syntactic. In exploring the notion of the discrepancy between syntax and morphology, Mycock (2015) refers to the study of Sadock (1991) who advances the view that a noun incorporation is a tool for separating morphology from syntax.

In expressing a different view on the lexicalist hypothesis, Mycock (2015) refers to Borer (1988), who points out that possibilities obtain for words to be formed after syntactic configurations. In this regard, Mycock (2015) discusses an example from a Modern Hebrew construct state noun, in which a nominal domain containing a definite noun modified by another noun is constructed in the syntax, hence violating strongly the account of the lexicalist hypothesis. Mycock (2015:39) furthermore argues that the case marking on the possessive pronoun that agrees with the stem of the possessor instead of the possessed plural noun in Upper Serbian seems to violate the lexical hypothesis. Mycock (2015) also refers to the work of Harris (2000), which examines how syntax manipulates morphology in violation of the lexicalist hypothesis. Mycock, (2015:39) discusses Udi endo-clitics person markers which may be affixed and infixes to words. Consider the following example:

- (1) a. yaq'ane bast'a
 yaq'-a- ne ba-st'a
 road-DAT-3SG in- LV.PRS
 'on the road he opens it'
- b. zavoda ašnebsa
 zavod- a aš- ne- b-sa
 factory-DAT work-3SG-DO-PRS
 'She works in a factory'

Therefore, Mycock (2015) states that the availability of such data in many languages leads scholars such as Anderson (2005), and Lieber and Scalise (2007) to argue for a reformulation of the lexicalist hypothesis to take account of syntax-morphology interfaces. Mycock concludes by positing that the interaction between syntax and morphology is advanced in recent research and that it should be extended to other components of grammar.

Another aspect of syntax interfaces research relates to the syntax-semantic interfaces. Mycock (2015) contends that for a native speaker to determine a correct sentence, there are two parameters to consider: syntactic conformity and the meaning it has. She further postulates that exploring the speaker's ability to link syntactic structures with their suitable interpretations is a significant subject in research on syntax and semantics relations. She points out that the current research regarding syntax-semantics interfaces is concentrated on the borderline between semantics and syntax. Mycock (2015) posits that interpretation and formalization of the principle of compositionality have significant repercussions for the structural design of grammar. She contends that the principle of compositionality entails a range of assumptions about the syntax-semantics interface and that the assumptions about 'compositionality are prominently based on whether they describe all syntactic configurations as preceding semantic configurations, or whether syntax-semantic configurations are integrated.

Lechner (2015) discusses the syntax-semantics interaction with regard to questions of scope inversion, covert movement, strategies for delayed structure, Copy theory, and referential opacity. According to Lechner (2015), research on the syntax-semantics interface frequently adopts Frege's standard of compositionality. Lechner (ibid.) asserts that the principle of compositionality assumes interpretations of composite syntactic configurations to be functionally reliant to interpretations of their immediate constituents, in addition to the way these constituents are organized. Apart from the requirement set in the principle of compositionality, Lechner (2015) maintains that the current approaches to grammar differ considerably in the perspective they take on the role of syntax in the construction of the grammar and in the semantic principles of interpretation they concede. Lechner argues that it is challenging to offer a constant, collectively appropriate description of the syntax-semantics interface. From the diverging views regarding the question of the syntax-semantics suggests interaction, Lechner concludes that such circumstances are prototypically exemplified by quantifier scope ambiguity.

With regards to the syntax-pragmatics interfaces, Mycock (2015) maintains that syntax is inseparable from semantics, like pragmatics is inseparable from syntax. She argues that, since pragmatics involves studying meanings in contexts, its relationship with syntax is based on the effect of such contexts expressed in syntactic constructions and their contextual acceptance. She points out that sentences are not only acceptable just because of their well-formedness and interpretability, but also because of their contextual felicity. Thus Mycock asserts that sentences can be syntactically correct but contextual infelicitous.

2.3 The functional category DP

Linguists have for long held the view that the semantic core of the nominal projection is the noun. This view bears similarity to the view that the clause projection is headed by the verb. In the contemporary research literature, it is frequently argued that the nominal and clause projections are headed by more elements than nouns and verbs, respectively. Chomsky (1995), Hornstein et al. (2005), and Van Gelderen (2013) postulate that clauses are extended projections of the verb with the VP-projection which is controlled by functional projections, such as IP and CP, giving rise of the C-I-V hierarchy. On the other hand, the nominal expression is argued to be headed by functional projections, which were introduced as DP-hypothesis by Abney (1987). The argument that nominal phrases functional projections rather than nominal projections informed the Determiner Phrase hypothesis (DP-hypothesis), which was systematically expounded in Abney's (1987) doctoral dissertation¹. The DP Hypothesis posits the determiner as the head of the nominal projection. Hornstein, Nunes, and Kleanthes (2005) posit that in the late 1980s many works were dedicated to establishing the DP-hypothesis by exploring facts it bears across languages. They state that two arguments were propagated; one concerning the grammatical and distributional features of determiners, and the other concerning noun movement that supports postulation of at least one functional projection above the NP. Alexiadou, Haegeman and Stavrou (2008) posit that it was assumed that there is at least one head position that receives the moved noun which was assumed to be the position of the determiner. Alexiadou

¹ However, Coene and D'hulst, (2003) reports that the notion of determiners to head nominal phrases was initially introduced by Brame (1982) who thought of the definite article (D) to dominate the nominal expression whereby the article constitutes the supreme projection DP.

et al (2008:4) discuss the example of the syntactic distribution of Italian lexical noun **casa** from Longobardi (1994) following example:

- (2) a. La mia **casa** è bella.
 ‘The my house is beautiful.’
 b. Casa mia è bella.
 c. *La casa mia è bella.
 d. *Casa la mia è bella.

According to Alexiadou et al (2008), the definite article **la** occurs before the possessive **mia** in (2a), and the nominal occurs before the possessive **mia** without the definite article in (2b). They state that the sentence is ungrammatical when the article appears in the context where the noun **casa** precedes the possessive **mia**, as in (2c-d). In this regard, they argue that N-movement occurs as follows: “Leaving aside a detailed analysis of the position of **mia**, one might say that while in (2a) the noun head occupies the head position of the lexical projection of N, and D is the head of a functional projection dominating NP, in (2b) N has moved to the position of the determiner”. Alexiadou et al. (2008:4) give the following representation:

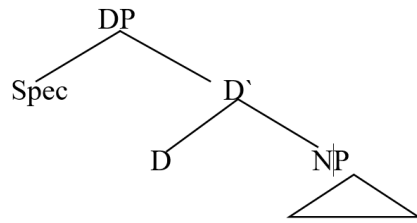
- (3) [DP [D casan] [mia [NP [N tn]]]]

As demonstrated in (3), Alexiadou et al. (2008) state that the moved noun has left a trace indexed t_n . In minimalism, the trace is replaced by a copy tenet in which a moved noun is crossed to symbolize the copied noun, as shown by Alexiadou et al. (2008:4):

- (4) [DP [D casa] [mia [NP [N ~~casa~~]]]]

In this regard, Longobardi (2012) states that the raising of N to D is implicitly noticed. Assuming the generative syntax framework, Alexiadou et al. (2008) state that all functional categories may head a phrase. They point out that functional categories include, but are not limited to, items such as articles, demonstratives, possessives, complementizers, and numerals, depending on language-specific requirements. Abney’s (1987) argument that functional categories are incorporated under the Determiner, that the determiner is the head through which nominal projections agree with the DP, and the NP complement of the determiner, is structurally represented as follows:

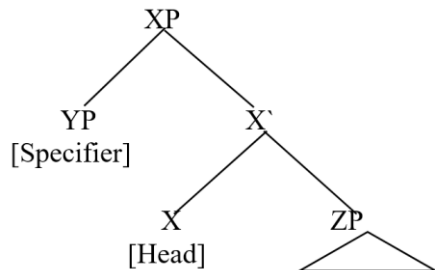
(5) Abney's (1987) DP-hypothesis structure



According to Alexiadou et al. (2008), in the Phrase Structure represented in (5), the Determiner head (D) selects its complement NP to form the intermediate D' . The intermediate D' successively merges with the specifier (Spec), forming the maximal projection DP.

Alexiadou et al. (2008) and Martine Coene and D'hulst (2003) posit that the DP-hypothesis is rooted in the X-Bar Theory of the Minimalism Program, postulated by Chomsky (1993; 1995, 2000). Coene and D'hulst (2003) assert that the X-Bar theory structure in (6) below is organized endocentrically, whereby each head projects a larger syntactic element, and each phrase must be c(onstituent) commanded by only one head. With reference to Chomsky (1993; 1995, 2000), Alexiadou et al. (2008) state that X heads the syntactic phrase XP, and that X is complemented by a constituent ZP. They maintain that when X combines with its complement these elements form X-bar (X') which is the immediate projection of X. The projection X is then combined with another constituent YP which is known as a specifier. This combination forms the maximal projection XP, as indicated below:

(6) The structure of X-bar theory



In regard to definite articles and demonstratives in languages with overt articles, Alexiadou et al. (2008) consider these elements to be determiners. They maintain that articles and demonstratives possess an inherent feature of D in their functional domain. They state that, while definite articles and demonstratives, on the one hand, share some semantic and distributional features,

there are also other reasons for not viewing them as the same. For instance, it is on the one hand that the article heads the category D, whereas the demonstrative may (not necessarily) occur as SpecDP. Alexiadou et al. (2008) refer to Lyons (1999) who proposes that articles are specifiers of DP, while affixal articles are realized under D. His suggestion corresponds to that of Cinque (2002), who views definite articles as specifiers of functional categories, and DPs as definite nominal expressions, thus contributing to the debate on the form and function of determiners.

In exploring the properties of the functional category D, different authors address the form and function of determiners cross-linguistically. Ghomeshi, Paul, and Wiltschko (2009), state that the postulation of the category determiner was, to a large extent, developed by invoking data from Germanic and Romance languages. They explore the view that what conventionally defines the category determiner, is that it converts a predicate into a referential argument, as proposed by Abney (1987), and that it encodes definiteness, as posited by Lyons (1999). However, they challenge the view that the determiner converting a predicate into argumenthood is not applicable cross-linguistically Chierchia (1988) posits that nouns may differ in their meaning, hence, certain semantic parameters are the central basis for argumenthood.

Ghomeshi et al. (2009) postulate that, cross-linguistically, there is no direct correspondence between the category determiner and the position it occupies. They argue that the membership of the category determiner must not necessarily be a prerequisite for an element occupying the syntactic position that contains D in the DP projection. Ghomeshi et al. (2009) refer to Lyons (1999) who asserts that the indefinite article **a** (in English) occurs in a lower position than D. Ghomeshi et al. (2009) examine various views on how determiners are postulated cross-linguistically concerning their form and function.

Regarding the features expressed in the Determiner, Wiltschko (2009) examines the determiner system in the three distinct languages German, Halkomelem, and Blackfoot which are from the Germanic, Central Coast Salish, and Algonquian families, respectively. She argues, following Longobardi (1994), that for a word to fit in the functional category D, the particular word must be able to create arguments out of predicates. Referring to the work of Chierchia and Turner (1988), Mathieu (2009), and Cswper and Hall (2009), Wiltschko (2009) posits that languages differ in this respect. She contends that the determiner is fundamentally associated with its ability

to turn a predicate into a referring expression. According to Wiltschko (2009: 26-27), this property can be proved cross-linguistically.

The issue of the association between determiners and definiteness is not addressed by Wiltschko, (2009) since determiners in the languages in her study are inherently definite. Thus, Wiltschko (2009) asserts that German determiners are inherently definite. She maintains that German determiners lack binary antagonism with indefinite determiners, and that definiteness is not among the defining features of determiners in both Blackfoot and Halkomelem languages.

A further study concerning the D features cross-linguistically is that of Ghomeshi and Massam (2009) who examine the determiner in the context of proper NPs. They posit that if that the core role of the determiner is to manifest referentiality or definiteness, it is expected that proper nouns appear as bare nouns, with no determiners. This is because proper names are argued to bear an inherent feature of definiteness or referentiality. They address the question of whether proper nominal phrases are bare NPs cross-linguistically, or whether they may occur with abstract determiners. They maintain that a noun occurring in place of an argument is not a bare NP if the view is that determiners essentially turn a predicate into an argument. They argue that both common and proper nominal phrases can be analyzed as having a DP dominating an NP, where in the case of common nominals, the DPs are formed by overt determiners, whereas in proper nominals, DPs are formed by null determiners. However, they posit that this view does not obtain across languages, and it may be language-specific (e.g., English). Ghomeshi and Massam (ibid.) maintain that there are some languages with overt determiners occurring with proper nouns (e.g. Catalan, Fijian, Greek, Halkomelem, Kavalan, Niuean, Seri, and $S_{kwxwú7}$ mesh)². They posit that the particular morpheme that is regarded as a determiner contrasts among these languages, where in Catalan, the definite determiner displays a mutual distinction before masculine nouns beginning with a consonant. Ghomeshi and Massam (2009) discuss various examples to postulate that the prefix **ti-** occurs with arguments that are both proper and human. Consider the following example from Ghomeshi and Massam (2009:70) in Kavalan:

- (7) a. p- um-ukun=ti ti-tina (*ti-)tazuNan [Kavalan]
 hit-av=ASP TI-Mother TI-woman

² For a detailed discussion on these languages see Gili 1967 (Catalan), Alderete 1998 (Fijian), Anderson 2004 (Greek), Wiltschko, 2009 (Halkomelem), Chang & Lee, 2002 (Katalan), Seiter, 1980 (Niuean), Marlett, 2008 (Seri) and Gillon, 2009 ($S_{kwxwú7}$ mesh).

‘Mother has hit a woman.’

- | | | |
|----------------------------|---------|-------------------|
| b. p-um-ukun=ti | ti-abas | (*ti-)tina-na |
| hit-AV=ASP | TI-Abas | TI-mother-3sg.gen |
| ‘Abas has hit his mother.’ | | |

In the examples in (7), the common noun **tanzuNan** ‘woman’ does not co-occur with the prefix **ti-** while personal names such as Abas in (7b) exhibits the prefix obligatorily. Such languages provide evidence for the argument that the proper DPs that are formed by null determiners are language-specific rather than a cross-linguistic phenomenon. They state that definite proper determiners involve features [proper] and [singular] and that the two features are employed in N^o and D^o categories. They further argue that the former feature is linked with definiteness across languages.

In regard to English and Squamish languages, Gillon (2009) states that definiteness is not a semantic feature that is marked across languages. She asserts that the determiner of *Skwxwú7mesh* is not inherently definite. She maintains that the determiner may occur in the DP system of the language regardless of whether it serves to introduce new or familiar information. Thus, she argues, that the determiner of *Skwxwú7mesh* does not encode definiteness across languages since the determiner can occur in the novel or familiar contexts, as illustrated in (8) from Gillon (2009:184). Therefore, she argues, definiteness should be viewed as a language-specific semantic feature.

- (8) a. Chen kw’ách-nexw **ti/ta/kwa/kwi** swí7ka.
 1SG.S look-tr(lc) DET man
 ‘I saw a man.’ (novel context)
- b. Tsí7 **ti/ta/kwa/kwi** swí7ka ná7 ta lám’.
 exist DET man loc DET house
 ‘There’s a man in my house.’ (novel context)
- c. Na kw’áy’ **ti/ta/kwa/kwi** swí7ka.
 RL hungry DET man
 ‘The man is hungry.’ (familiar context)

In example (8a) above, the determiner appears in a new setting that signifies the generic interpretation regarding (in)definiteness. The example in (8b) encodes a similar interpretation when the determiner is used existentially. In arguing that the determiner in *Skwxwú7mesh* is not associated with definiteness, Gillon, demonstrates that the determiner may also be used in a

familiar context, as in the case of (8c), where (8c) is the subsequent utterance from either (8a) or (8b). From this perspective, Gillon (2009) decomposes definiteness in terms of the aspects of domain restriction and uniqueness presupposition. She proposes that domain restriction embodies definiteness across languages, whereas the uniqueness presupposition is language-specific. She contends that the feature of uniqueness is absent in *Skwú7mesh* determiners. For this reason, Gillon (2009) asserts that definiteness cannot be the semantic feature that defines the determiner universally. Thus, she states the determiner in *Skwú7mesh* differs from that of English.

Paul (2009) examines Malagasy determiners. He contends that the Malagasy determiner does not encode definiteness, unlike the Squamish determiner which is reported to occur optionally. According to Paul, the Malagasy determiner manifests familiarity of the referent in the discourse context. She maintains that the determiner does not signal a uniqueness proposition. Furthermore, Paul postulates that the Malagasy determiner encodes familiarity only when it occurs optionally; and where the determiner occurs to serve argumenthood, it does not encode familiarity. She argues that bare NPs in Malagasy encode familiarity inherently. Thus, she concludes that the form of the determiner does not automatically correspond to its function across languages and that this correspondence should be viewed as being language-specific.

A further aspect discussed by Ghomeshi et al. (2009) concerns the view that the syntactic projection DP occurs freely from the features associated with it. The authors postulate that the relationship with the discourse context is a core function that is present across languages. Thus, familiarity and uniqueness are elements related to definiteness, and elements related to deixis may be the core function of the DP projection universally. They argue that referentiality and argumenthood are language-specific. As regards the syntactic configuration of the functional NP, Ghomeshi et al (2009) consider the determiners in two ways, namely a view that considers the determiner to be a category that differs from other categories such as numerals and quantifiers, and a view that considers determiners as the only functional word that occurs in the Determiner position. According to Ghomeshi et al (2009), the latter view is compatible with cartographic syntax, which recognizes different layers of the functional configuration within an NP, while in the former, the indefinite determiner is considered to occupy the Determiner position like the definite determiner.

2.3.1 The emergence of articles and demonstratives as determiners

Van Gelderen (2013) points out that in the earlier stage of X-bar theory, articles and demonstratives were considered to be an integral part of the nominal projection occupying the maximum projection of the specifier of the NP. She states that the notion of the specifier was slightly different from that which is currently assumed in the DP perspective. In earlier views, the concept of specifier permitted the occurrence of more than one specifier in a single nominal projection. By contrast, only one specifier is permitted in current generative views of the DP projection. Van Gelderen (2013) contends that articles and demonstratives both occupy the same Determiner (D) position, as they are categorized as closed classes.

Regarding the interpretation of demonstratives in the nominal expression, scholars claim that like a definite article, demonstratives can encode definiteness and referentiality. According to Lyons (1999), the only difference is that, while demonstratives do not have a generic inference, articles do. Lyons (ibid.), asserts that articles and demonstratives are definite in the sense of identifiability. In addition, Lyons (1999) and Diesel (1999) posit that demonstratives serve a deictic function, in terms of which they relate to linguistic referents. The deictic function guides the hearer(s) to identify the communicated entity. The deictic feature is interpreted as either encoded, or not, as [+/-proximal/distal]. However, Lyons (1999) points out that sometimes demonstratives are neutral with regard to spatio-temporal situations as in English, particularly when used as a proximal in relatives. He refers to similar instances in many other languages such as French, Egyptian Arabic, Modern Greek, and Finnish. Lyons asserts that the French demonstrative *ce* for example is inherently neutral regarding marking distance. He maintains that for this demonstrative to mark manifest deictic interpretation, it should be accompanied by the reinforcer *-ci* or *-là* which are inherently deictic.

2.3.2 The projection of articles and demonstratives

In terms of the view that articles and demonstratives belong to the same class, it would be assumed to occupy the same position in the nominal projection. However, Alexiadou et al. (2008) posit that these elements may occur together in some languages such as French, Greek, and Finish. Thus, there is a need to establish at least two positions: one to be occupied by an

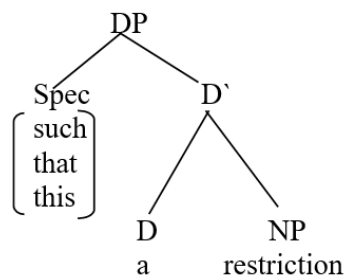
article, and another with a demonstrative. With reference to the examples from Giusti (1997), Alexiadou et al. (2008:108) discuss the following example from Italian:

- (9) a. Di chi hai la foto sulla tua scrivania? [Italian]
 of whom have-2SG the picture on-the your desk
 ‘Whose picture do you have on your desk?’
- b. *Di chi hai **questa** foto sulla tua scrivania?
 of whom have-2SG this picture on-the your desk

With reference to the above example, Alexiadou et al. (2008) explain that the article **la** in (9a) has a different status from that of the demonstrative **questa** in (10b). Accordingly, they maintain that the article heads the intermediate projection while the demonstrative is contained in the maximal projection.

Alexiadou et al. (2008) furthermore, argue that there is a similar reading between ‘this’ and ‘such’ in languages such as English and Greek. They state that both ‘this’ and ‘such’ is associated with an entity already established in the discourse context. They maintain that a phrase like ‘such a reaction’ means ‘a reaction of this kind’. They posit that both **aftes** ‘that’ and **tetios** ‘such’ are considered to be demonstrative pronouns in Greek. Alexiadou et al. (2008) assume that ‘such’, ‘this’, and ‘that’ occupy Specifier-of-DP (Spec, DP) position, as represented below:

- (10) ‘The article and the demonstrative projection’



The demonstratives occur in the left-most position, i.e., Spec, DP. Demonstratives are regarded as originating from somewhere lower in the DP and then moved to SpecDP (Giusti, 1997, 2005; Shlonsky, 2010). This assumption is supported by evidence from several languages such as Romania, Spanish, and Greek in which the demonstrative moves from the lower position to the maximal position of the projection.

2.3.3 Views on the distinction between lexical categories and functional categories

Recent studies in generative syntax give considerable attention to the question relating to the distinction between lexical and functional categories. This sub-section briefly discusses Rizzi and Cinque's (2016) view regarding the distinction between these two kinds of categories. They point out that studies that try to differentiate lexical and functional classes are traced back to Aristotle's difference between concepts and grammatical meaning and that this distinction isolates content categories like adjectives, verbs, and nouns from grammatical categories like determiners, copulas, and complementizers. They further maintain that functional categories like determiners, copulas, and complementizers encode abstract interpretative features like definiteness or specificity, predication, and subordination, respectively. With reference to studies of Carlson (1983) and Muysken (2008), Rizzi and Cinque, (2016) state that purely functional words may, under certain circumstances be removed from constructions while maintaining their original meaning. By contrast, the absence of a lexical word leads to the loss of meaning. However, they assert that derivational morphology affects only lexical categories while inflectional morphology affects both lexical and functional categories. In this regard, Rizzi and Cinque (2016) assume that the seeming dissimilarity between lexical and functional classes is more abstract than concrete, functional categories incorporate both inflectional and derivational operations. For example, Rizzi and Cinque (2016:140) posit that the English future morpheme **will** and past morphemes **-ed** as examples of the class of functional elements, as opposed to lexical elements.

With reference to Chomsky's (1965) **Syntactic Theory**, Rizzi and Cinque (2016) state that the difference between functional and lexical heads is described as the difference between lexical and minor items. They assert that in the early version of X-bar theory, lexical words were regarded as the heads of projections. In this regard, they point out that the emphasis in recent generative research has substantially shifted from lexical to functional heads. Thus, they argue that in recent syntactic studies functional heads dominate the phrasal projection. Rizzi and Cinque (2016) state that functional heads occurring in morpho-syntactic structures generate syntactic movements, and other operations, and that functional heads encode parameters of syntactic variation as morpho-syntactic features. They propose that in syntactic representation lexical projections are realized as rich zones containing a series of functional projections,

projected in cartography. In regard to the particular grammatical position of various functional categories in the syntactic construction, Rizzi and Cinque (2016) posit that there appears to be a specialization in the positions where functional words are established cross-linguistically. In this regard, they state that auxiliaries regularly occupy the position of functional categories like tense, aspect, negation, mood, and voice.

Concerning the way in which the borderline between lexical and functional categories can be identified, Rizzi and Cinque (2016) maintain that the criteria used to differentiate lexical from functional categories are not always clear as to what category one should allocate certain words. For instance, they question the class to which one can allocate demonstrative reinforcers like the demonstrative reinforcer **here** in the construction **these here guys** or its French equivalent **-ci** in **Ces hommes-ci**. Rizzi and Cinque (2016) argue that a further challenging question is whether different functional items can be distinguished with the view that some of them such as determiners, complementizers, and copulas have a purely grammatical meaning to the extent that they can be eliminated from constructions without affecting the general meaning of such constructions. They posit that other functional categories like functional prepositions **to**, **at**, **from**, demonstratives, quantifiers, and tense and aspect affixes cannot be easily omitted without compromising the meaning of the clause.

2.4 Principles and properties of Minimalism, Cartography, and Information Structure

2.4.1 Minimalism

The Minimalist Program (MP) of generative syntax, initially postulated by Chomsky (1995), developed from in the Principles-and-Parameters theory and the earlier model referred to as the Government-and-Binding (GB) theory. Hornstein et al. (2005) assume that the significant question which the Principles-and-Parameters (P&P), like earlier generative grammar versions, aimed to solve, which was similarly addressed by Plato, is how children acquire languages rapidly and timely despite poor exposure of the language they are exposed to. The view advanced in generative grammar, including the P&P, was that children are born with the special Language Acquisition Device which contains the principles and parameters collectively referred to as Universal Grammar (UG). The assumption was that human linguistic capacities are a result of the environmental inputs and principles of the UG. Even though these principles are fairly

complex, they need to be learned because they constitute the innately endowed language faculty (Hornstein et al., 2005; Radford, 1997). Minimalism fundamentally adopts this view by assuming that the Principles and Parameters architecture constitutes the borderline model for any adequate grammatical approach.

Hornstein et al. (2005) discuss the key concern of research in the Minimalist Program, namely to relate sounds with meaning in the language. They state that Universal Grammar (UG) involves a computational system that feeds into the two mechanisms of the human mind dealing with sounds and meaning. These two mechanisms are the Articulatory Perceptual and the Conceptual Intentional modules (Hornstein et al. 2005). Van Gelderen (2013) states that Minimalism builds syntactic constructions using the operations Agree, Merge and Move. Items are selected from the lexicon to the computational system. Then, the selected items are merged to form larger structures. Finally, the merged items are moved to reorganize them so that they can be in the position where they are not base-generated.

With reference to Chomsky (1995, 1998, 2004), Hornstein et al. (2005) state that merge is the most basic of the three operations. They maintain that merge is applied to two linguistic expressions to generate a new linguistic item. They discuss the relations between particular linguistic items in a regulated position, permitting the elimination of certain features needed for a derivation to converge. According to Hornstein et al. (2005) move re-organizes the merged elements resulting in them occurring out of their base-generated positions. In exploring the notion of Merge, Hornstein et al., (2005) refer to Chomsky's (1998) later version of Minimalism, Chomsky, which expresses the view that Move operates later to integrate Merge and Agree.

Hornstein et al. (2005) state that a minimalist perspective views human languages as analogous to several mechanisms since it is assumed that the three operations mentioned are the only ones that characterize human language. They further state that the differences across languages exist on the significance of the functional categories designated for a specific syntactic operation. Hornstein et al. (2005) maintain that the central distinction is based on the interpretable and uninterpretable features. They assert that interpretable features bear semantic content that is essentially construed with reference to their interpretive mechanisms. They posit that checking and deletion of interpretable features do not generate agreement or movement. On the other hand, they state that uninterpretable features should be removed at the interfaces to circumvent

the crashing of a derivation and they must be deleted either by the syntactic operation Agree or by Move as a last resort operation.

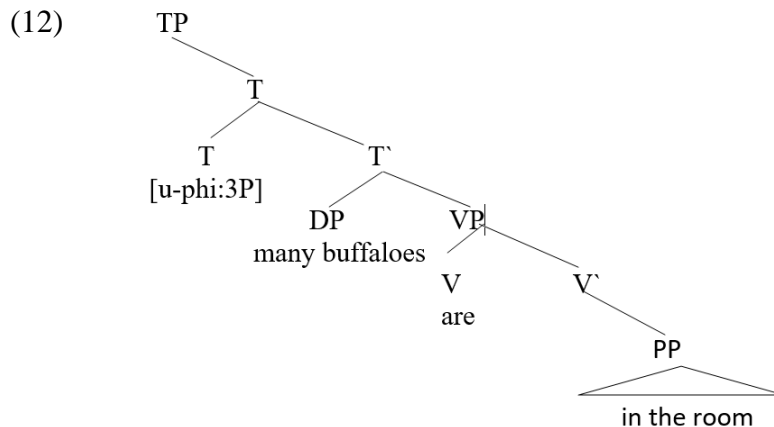
Van Gelderen (2013) points out that interpretable features are applicable at Logical Form (LF), and they contain categorial features, in addition to phi- (person, number, gender) features. The interpretable features are not erased after checking, since they are significant to the interpretative component. With regard to uninterpretable features, she asserts that they receive their value through pursuing and checking for interpretable features. She states that these valued features are not interpreted at Logical Form but the Phonological Form. Van Gelderen (2013) maintains that a paradigmatic example of an uninterpretable feature is Case. The derivation converges when Case features are checked at the syntax-phonology interface. She refers to the work of Chomsky (2000) which posits that feature checking is best economically realized by Agree, but when the Agree operation cannot take place in an appropriately local configuration, Move is needed as a last resort operation to save the derivation.

In respect to distinguishing interpretable from uninterpretable features, Van Gelderen (2013) argues that some features such as phi-features of nouns cannot be erased because they continue to be visible even after feature checking. She maintains that this is the reason why nominal domains can be moved cyclically to check the phi-features. She furthermore argues that uninterpretable features do not have this property. Thus, the DP cannot move to check Cases elsewhere after a case has been checked by that DP.

In regard to features and movement, Van Gelderen (2013) asserts that a major change occurred after the introduction of Chomsky's (1995) Minimalist Program. She shows that in 1998 Chomsky a probe-goal checking proposal that replaced checking through a Spec-Head agreement established through a c-command relationship. This entails that functional categories that need to be checked are supposed to search down for a Goal DP that will value their features. This change facilitated simplifying the existential construction in languages that have this feature, such as English. Van Gelderen (2013:17) discusses the example in (11) that displays Chomsky's (1998) derivation that involves the raising of the post-verbal DP to the specifier position of TP to agree with the verb in T.

- (11) a. There were **many buffaloes** in the room.
b. There was **a buffalo** in the room.

In discussing invisible features, van Gelderen (2013) asserts that the invisibility is realized through Logical Form-Raising of the DP or movement of the features of the DP, The AGREE in (12a) is derived as indicated in the structure in (13) below. In respect to this derivation, van Gelderen (2013:17) posit that the uninterpretable agreement features in T find the DP in the specifier of VP (i.e., vP), and the interpretable features of the DP value the phi- (person, number, gender) features of T, plural in the case of **many buffaloes**, of T.



Van Gelderen (2013) assumes that Agree is derived by an uninterpretable feature, a probe, searching in its c-command domain down the tree for a Goal with the appropriate interpretable features. She points out that in such a derivation tCere is no movement to the specifier position for reasons of case and agreement.

2.4.2 The DP-Hypothesis

Abney's (1987) DP-Hypothesis assumes that nominal expressions project higher functional categories which head their phrases, the Determiner Phrases (DPs). Scholars proposed that the noun phrase is headed by a functional projection, the Determiner Phrase (Abney, 1987; Horrocks and Stavrou, 1987; Hornstein et al., 2005; Longobardi, 1994; Radford, 2004). The DP hypothesis entails that there are constrained entities that have been considered to lodge the position of the determiner (D). In this version of the DP-Hypothesis, the best examples of the entities which occupy the D position are articles in the case English. This view proposes that nouns should not head the nominal phrase. Instead of this, articles are engaged to dominate this projection which is named the Determiner Phrase (DP). Concerning the syntactic structure of the DP projection, Longobardi (1994) firstly, refers to Jackendoff (1977), that nouns are heads inside noun phrases

(NPs), and secondly, he refers to Abney's (1987) proposal which posits articles to head the projection DP dominating the head D.

The NP-Hypothesis posits that the DP is in NP internal structure whereas the DP-Hypothesis posits that the DP internal structure subsumes the NP. In recent generative linguistic theory, the DP hypothesis has been accepted, rather than the NP-Hypothesis. In this regard, Progovac (1998) states that the DP-Hypothesis is generally favored by scholars, like the clausal structures of CP, IP, and VP. The view is that functional categories like Complementizer and Inflection exhibit the X-bar schema in that they head XPs with complements and specifiers. Hence, the same must be expected for functional heads like Determiners as the head of the DP internal structure. The assumption that all languages have the same underlying phrase structure entails that DPs should be viewed to project above NPs, both in languages with overt articles and in the so-called article-less languages. Progovac (1998), points out that even the article-less Serbo-Croatian projects DPs above NPs in argument positions.

Scholars generally concur that there is a syntactic position that hosts the category Determiner. Thus, determiners are assigned to occur in the fixed position in the order of functional categories. This view separates the category determiner and its syntactic position. Abney (1987) and Lyons (1999) are of the view that no one-to-one link exists between the functional word determiner and the syntactic position which is occupied by its members. In this regard, Ghomeshi et al. (2009) suggest that there are other word classes such as pronouns, proper nouns, and demonstratives that can take the position of the functional heads of the noun phrase. Ghomeshi et al. maintain that demonstratives are in complementary distribution with articles in English. However, they maintain that this complementary distribution does not hold cross-linguistically.

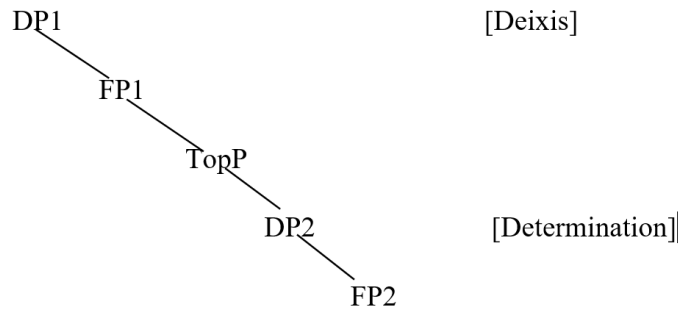
In the generative syntax, the properties of the DP-Hypothesis have evolved along the lines of the changing views concerning the description of functional words. In the initial stage of research on the DP-Hypothesis, the position of D was considered functional and related to a categorial label which is related to the word category associated with it. However, Lyons (1999) asserts that in the Minimalism Program, which is employed in this study, it was assumed that the functional categories comprise features of definiteness. Stanković (2014) and Veselovska (2014) both assume that a noun is the semantic core of the DP for languages with articles such as Indo-European languages, while in article-less languages, some morphological elements are studied

with respect to whether they exhibit the syntactic properties of a determiner. Chapters Four, Five and Six of this study examines the pre-prefix which is an (optional) inflectional pre-nominal element in the inflection of igiHa modifiers. In regard to the DP-Hypothesis the nominal domain is argued to include a Determiner domain, which contains functional content. According to Alexiadou et al. (2008), the Determiner domain is positioned pre-nominally. In chapters Four, Five, and Six of the current study, the pre-prefix is examined in relation to semantic and pragmatic features such as definiteness, specificity, topic, focus, and/or contrast.

2.4.3 The Split (decomposed/articulated) DP-Hypothesis

Since the DP is postulated as the equivalent to CP, scholars addressed the question of whether various information structural features such as force, focus, and topic associated with CP in Rizzi's (1997), can also be identified in the DP. One of the motives for the split DP was to derive post-nominal demonstratives without involving N-movement. Scholars have established that some languages permit both pre-nominal and post-nominal demonstratives, and others may display various determiners in the same DP. With reference to Giusti's (1997) view that the split DP accommodates numerous determiners which perform different functions in the DP, Aboh, et al. (2010) argue that the occurrence of uncanonical nominal modifiers in various languages requires the view that the left periphery in the nominal domain contains certain features such as topic and focus which attract nominal modifiers, thus providing evidence for the view of an articulate DP to accommodate the moving elements. He states that this provides empirical evidence for the need to split DP into several articulated projections which host semantic and discourse pragmatic features such as definiteness, specificity, focus, and topic. According to Alexiadou et al. (2008), the DP may be split (decomposed) into two layers analogous to those of CP labeled Force and Finite. Rizzi (1997) proposes Topic Phrase (TopP) and Focus Phrase (FocP) to be subsumed in the CP, Alexiadou et al. (2008) adopt the same view of the DP projection. Since topic and focus are related to the information structure of the fronted elements, the scholars posit that a TopP occurs between FP1 and DP2, as demonstrated below from Alexiadou et al. (2008:128):

(13) The split DP Hypothesis



Alexiadou et al. (2008) assert that the uppermost layer, DP1, is the position that bears the reading of the noun projection. They maintain that it encodes discourse-pragmatic features like familiarity, referentiality, and deixis, where the lower DP, DP2, is the position of the determiner that expresses definiteness and indefiniteness, respectively.

2.4.3.1 Perspectives on the universal DP-Hypothesis

As was stated in 2.4.2, the view of early generative syntax was that the noun heads the NP. Abney's (1987) DP-hypothesis introduced the view that the functional category Determiner (D) occurs as the head of the nominal projection. However, Abney's proposal was posited for languages with overt articles such as English. Consequently, a debate emerged as to whether a similar DP structure is suitable for article-less languages. Some scholars, like Corver (1990), Boskovic (2005, 2008, 2009), and Zlatić (1997, 1998) argued against the postulation of DP-hypothesis pointing out that it is inappropriate for nominal expressions which lack overt articles. Some studies, including Boskovic (2005, 2007, 2008, 2009, 2012; Despic (2011), Bošković and Gajewski (2014), and Bošković and Şener (2014) advance the so-called Parameterized DP-Hypothesis, in regard to which they contend that languages with overt articles, like English and German, have a functional DP projection. They assert that the lack of overt articles implies a lack of DP projection. However, this assumption has been challenged by many scholars who argue for a universal DP-Hypothesis applying across languages. This sub-section reviews the arguments which some scholars advance in arguing that the universal DP hypothesis obtains across languages.

Petrović (2011) contends that, similar to languages with overt articles, article-less languages such as Slavic, the DP analysis, and that the DP analysis is universal across languages. Among others,

Petrović postulates that the universality of DP is favored in terms of the syntactic parallelism between clauses and NPs, and the fact that the DP specifies the reference of the nominal domain in a similar way the TP functions to give a tense reference. He posits that the universality of DP relies on the certainty that there is syntactic parallelism associated with case assignment whereby T assigns nominative case, as D assigns genitive case.

Petrović (2011) refers to the study of Progovać (1998), which posits that the existence of a DP-layer in article-less languages, Serbian in particular, results from the fact that the ordering of nouns and pronouns with some restrictive adjectives is static and asymmetrical, in the sense that nouns essentially pronouns occur before and nouns follow these restrictive adjectives. Petrović argues that this noun-pronoun asymmetry gives evidence that pronouns in Serbian occupy a higher position than nouns, and that position is the Determiner. Hence, Petrović states that Serbian projects DPs above NPs in argument positions.

Veselovská (2014) argues for the view of a universal analysis for article-less languages, examining examples from Czech. She contends that Czech, a language with no overt articles, requires a DP analysis similar to that for article languages such as English. In support of this view, she examines arguments semantically, morphologically, and syntactically. She states that ‘the D/N-semantic interpretability of the semantic roles, the parallelism between VP/IP and NP/DP and the structural subject position for the Czech possessive nouns all satisfy the DP hypothesis. She maintains that the presence of D is associated with semantic features of the noun category which is associated with argumenthood. This implies that DPs with referential indices may be interpreted as arguments. She maintains that Czech observes this condition by demonstrating both features of (in)definiteness versus generic, and attributive versus restricted sets (N-semantics). Veselovská discusses the parallelism for functional and lexical domains of the VP/IP and DP/NP, in which the external argument is expected to be in the high periphery of the nominal projection. This projection shows a Specifier (SPEC) of the related functional head. In languages with overt articles, such as English, those elements include possessives. Veselovská argues this is the same for Czech, where possessives can bind an anaphor role as demonstrated by Veselovská (2014:14).

- (14) Chlapec/ Marie/ona/ Každý miluje ryby / svéREFL rodiče
 Boy/a boy/Mary/she/ everybody loves fish / his/her parents
 ‘Boy/a boy/Mary/she/everybody loves his/her parents’ fish.’

maintains that elements occurring in the nominal head domain are each distinguishable with specific features. In this regard, she states that the Czech NP has three layers that host demonstratives, numerals, quantifiers, and possessives like those suggested by Jackendoff (1977) for English. The list of entries was restricted to closed-class elements, and only possessive DPs were in the Specifier (SPEC) position of the functional head, in line with Abney (1987), since this domain was labeled functional. She argues that the absence of an overt article in the Czech language does not impede a nominal expression to encode referential, quantifiable, argumental interpretations, and be able to bind an anaphor.

With regard to N-to-D movement, Veselovská (ibid.) proposes, in line with Cinque (2002) and Longobardi (1994), the D head from the perspective of head movement in nominal projections. She maintains that the head of the Determiner is the landing site for some nominal elements, predominantly those occurring before the adjective modifiers. She proposes that two pronouns **někdo** ‘somebody’ and **něco** ‘something’ are in this category. Veselovská (2014:18) compares these two pronouns with the standard position of the Czech head noun **muž** (man) and **město** (city) in (15a-b) and (15c-d), respectively:

- (15) a. **něco**_i velk-é-**ho** -ti-
 something_{NOM} big_{GEN}
 ‘something big’
- b. **někdo**_i velký -ti-
 someone_{NOM} big_{NOM}
 ‘someone big’
- c. to velké **město**
 the_{NOM} big_{NOM} city_{NOM}
 ‘the big city’
- d. ten velký **muž**
 the_{NOM} tall_{NOM} man_{NOM}
 ‘the tall man’

Veselovska (2014) adopts the analysis of Veselovská (2003) that views the genitive case assigned by the inanimate **něco** (something) above as a feature that supports the latter’s head status. Thus, she states the DPs license these structures as examples of N-to-D movement because pronominals require a position in the left periphery of the nominal projection where the

head can land. Thus, Veselovská argues that Czech NPs do have a DP projection, despite the property that the D does not host an overt determiner.

Another study of the universal DP is that of Kim (2019), who analyzes nominal structures in a cross-linguistic perspective. Kim (2019) recommends a universal theory of nominal modifiers from the viewpoint of Korean, the language that allegedly lacks an open class of adjectives. Kim maintains that there is a close relationship between the position of N modifiers and their semantics in Korean. She further postulates that the surface position of a Korean nominal modifier is determined relatively by its morpho-syntactic complexity but in this language being a morpho-syntactically complex language, a nominal modifier does not necessarily entail carrying indirect modifier semantics, as opposed to what has been postulated in Kang (2006) and Cinque and Rizzi (2010).

Kim (2019) suggests a universal DP structure that encompasses three sub-DP layers labeled the High Field, the Middle Field, and the Low Field. This proposal posits that all DP-internal elements such as lexical articles, adjectives, focused constituents, and demonstratives originate from the Low Field, as schematically represented in (16) below. In regard to this example, Kim (2019:5) states that $DP_{d/r}$, DP_q , and DP_p represent DP-deictic/referential, DP-quantificational, and DP-predicative respectively, while FocP and LocP represent Focus Phrase and Locative Phrase respectively:

(16) ‘Three fields inside a full-fledged DP under the new split-DP analysis:’

$[DP_{d/r}$ [+referential; +/-deictic; +/-definite] High Field	$[DP_q$ [+quantificational] Middle Field	$[DP_p [FocP [LocP [UnitP/PIP [SortP [nP [\sqrt{P} N]]]]]]]$ [+predicative] Low Field
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According to Kim, any focused constituent may occur at [Spec, FocP], and LocP presents demonstratives and articles and possessives. Both [Spec, nP] and [Spec, \sqrt{P}] may bear thematic roles. However, the thematic roles they have are not alike to each other. She states that universally no more than three adjectives typically occur within the same DP domain. In case they co-occur, they do so in the hierarchical order of ‘focused ADJ > sortal ADJ > thematic ADJ’ at the underlying level.

Köylü (2021) contends that the view on the associations between NP or DP status of the nominal domain and certain clustering of syntactic or semantic properties, as proposed by Bošković and collaborators should be abandoned. Köylü (2021) explores examples from Turkish, Korean, Vietnamese, and Lithuanian which are article-less languages, to demonstrate that the analysis suggested by Bošković, and his collaborators are not conclusive to categorize those languages as NPs because they typically rely on theory-internal conventions. Thus, Köylü (2021) contends that it is essential for future research to examine each language on its own to determine whether it does or does not project DPs rather than to assume parallelism between an NP or a DP, as proposed by Bošković (2005, 2007, 2008, 2012) and Bošković and Şener (2014).

The projection of the DP predication above the Focus Phrase was not first introduced by Kim (2019), but in Panagiotidis and Marinis's (2011) proposal of Determiner Spreading as DP predication in Modern Greek. Panagiotidis and Marinis (2011) explore the structure of Determiner Spreading (DS) constructions from a syntactic and semantic point of view and propose that the structure of the DS in Greek gives evidence, on grounds of its interpretive restrictive and predication properties, for a DP predication (DP_{Pred}) structure. They posit that the Greek adjective occurring in the nominal expression as a modifier with its definite determiner represented as a Determiner predication (D_{Pred}) structure. They argue that the structure of the DS includes a DP with a DP specifier, the subject of predication and that the whole constituent serves both as an argument and as a predication structure.

Two preferred word orders of the Determiner Spreading (DS) structure in Greek as postulated by Panagiotidis and Marinis (2011) are Determiner-Noun-Determiner-Adjective and Determiner-Adjective-Determiner-Noun. In regard to these word orders, they posit that the DS configuration in Modern Greek has a predicative interpretation in the sense that there is a sort of Determiner predicate (D_{Pred}) bearing (an) interpretable feature(s) that enable(s) it to mediate in a predicative relation between its specifier (the subject of predication) and the NP in its complement.

2.4.4 Cartography

Cinque and Rizzi (2008) postulate that the cartographic studies framework addresses the question of what are the right structural maps are for natural language syntax. In this regard, they posit that Cartography is neither a theory nor a hypothesis, rather it is a research topic that tries

to draw maps as precise and detailed as possible of syntactic structures. Its emergence is informed by the way interpretable features are represented. They argue that the fundamental advances in Cartography result from the extension of the X-bar from lexical categories to the functional categories i.e., CP-IP-VP, assuming that other syntactic constructions such as nominals are equally suitable for X-bar analysis. According to Rizzi (1997), Cartography posits that both phrases and clauses are complex hierarchical sequences of the X-bar schema which takes a lexical category as the lowest building block and is dominated by other blocks which are headed by a functional element. Rizzi (1997) posits that the initial projections entailed Complementizers-headed CP, the Inflectional-headed IP, and the Verb-headed VP.

Rizzi (1997) suggests that fronted elements such as topics and foci are articulated as projections of Topic and Focus heads, comprising *wh*-topics, focus, relatives, among others. This contrasts with the traditional generative view that all fronted elements should be hosted by Complementizer Phrase (CP). Rizzi points out that the structure of the CP offers a twofold option: the first involves the flat structure which violates the binary principle through the projection of multiple specifiers under CP, and the second involving CP recursion to project or host the X-bar constituents.

Within the framework of the Minimalist Program (MP), several scholars have addressed questions regarding the Economy Principle. For instance, the CP, which exhibits the X-bar structures, includes among other elements, topic, focus, questions, and relatives posits that the maximal projection of the elements is CP. In this regard, the CP is interpreted with a recursive feature when the construction has multiple X-bar expressions otherwise, functional heads could be merged into one CP making a flat configuration.

Questions to fill the gap concerning the CP projection were addressed by Rizzi's (1997) Cartographic study. In this study, syntactic operations such as topicalization and focalization are viewed to give rise to the movements of constituents to the left peripheries rather than permitting a recursive CP. Rizzi proposes the splitting of CP into different functional heads, resulting in such functional projections as ForceP, FocP, TopP, AgrP, and RelP. Cinque (2002), Cinque and Rizzi (2008), Shlonsky (2010) assert that although languages vary in respect to the movements they permit in their projections they overtly realize, they share the same structure, even in the absence of overt evidence for it.

In an interview conducted by Mao and Meng (2016) Guglielmo Cinque contends that if a grammatical feature is found in one language, then it is confined to be postulated in every other language, even if it is not overtly evidenced. In this interview, Cinque further argues that this position is desirable since it considers at elements that are not overt. This view is also supported by Shlonsky (2010), who postulates that Cartography has the view that syntactic structures are uniform to architecturally represent the grammatical or functional information appropriate for semantic-pragmatic interpretation. Along similar lines, Cinque and Rizzi (2008) state that the Cartographic framework is not an isolated framework, but an approach related to general principles rooted in the Minimalist Program. They maintain that the Cartography represents a principled typology of UG principles. Cinque and Rizzi (2008) argue that functional projections are universal in regard to the types of heads (X-bar) and specifiers (XPs) they involve, in their number, and their relative order even when languages differ in the type of movements that they permit, or in the extent to which they overtly realize each head and specifier.

2.4.5 The relation between Minimalism and Cartography

As far as the relationship between Minimalism and Cartography is concerned, Cinque and Rizzi (2010) point out that Chomsky frequently states that the Minimalism and Cartography frameworks are compatible. They contend that there is no conflict between Minimalism and Cartographic research, and if there is a tension between them, it concerns the division of labor among them. According to Cinque and Rizzi (2010), the division of labor entails that Minimalism centers on development operations, whereas Cartography centers on the fine details of the generated structures.

In discussing the division of labor between Minimalism and Cartography, Cinque (2016) states that, structurally, Cartography is compatible with Minimalism, although the latter is more focused on how to phrase structure is constructed by the basic operation of merging two elements. He clarifies that one of the two constituents may dominate the projection while the other one is a phrase, or they may be two heads or two phrases. Thus, Cinque contends that Minimalism is more interested in primary operations which are external merge, labeling, internal merge (move), and possible constraints on movements. Cinque (2016), maintain that Cartography maps from Minimalism once a syntactic operation is having merge and labeling, and the lexicon is identified from both lexical and functional elements.

Cinque states that the Minimalist Program, as postulated in Chomsky (2004) posits that language difference is attributable to functional features in the lexicon. According to Rizzi (2016), the cartographic enterprise relies on the same functional features in the lexicon, hence the compatibility between Cartography and Minimalism. Cinque is of the view that both Minimalism and Cartography are not theories but programs. He states that Cartography employs the basic tools of Minimalism which are merge, movement, and other operations that characterize Minimalism. Rizzi states that Cartography is concerned with the number of functional projections and the question of how they are organized, and that both Minimalism and Cartography employ the same linguistic tools in the sense that they complement each other. Cinque points out that MP may not be focused on mapping out the entire nominal structure as it will only choose a few projections, say NP and DP, without involving the intervening projections. Thus, Rizzi states the Cartographic enterprises deals with the question of whether there are projections above and below the DP, between it, and in the NP.

Cinque contends that the Cartographic studies approach itself, through its strong or weak version, originated at the very beginning of the generative grammar in Chomsky (1957). He contends that the first draft of Cartography correlates with Chomsky's (1957) configuration of perfect aspect, progressive aspect, and passive voice in the rewording rule (aux →. . . (have+en) (be+ing) (be+en)), yielding sentences like **(the food) had been being prepared**. He additionally points out that Cartography is not a new program since both Chomsky (1972) and Jackendoff (1972) proposed to syntacticize the focus and topic of information structure to focalization and topicalization. Cinque argues that the newness of Cartography is simply that it takes to the extreme what has always been one of the major concerns of the generative enterprise since scholars only started seeing the experimental and theoretical proof for a specific syntacticization of information structure in Rizzi's (1997) work.

2.4.6 Lyons's (1999) view on definiteness and specificity

In recent studies, the notions of definiteness and specificity have become a fundamental topic in theoretical semantics. Before the emergence of Lyons's (1999) proposals on definiteness and specificity, the linguistic debate was concerned with whether articles were the only exclusive elements that encode features of definiteness and specificity. In positing four essential notions for defining definiteness, namely familiarity, identifiability, uniqueness, and inclusiveness,

Lyons (1999) argues that articles are not the only elements that bear the semantic interpretation of (in)definiteness and (non-)specificity.

In exploring the notion of familiarity, Lyons (1999) refers to the study of Christophersen (1939) which posits that the definite article denotes the existence of common knowledge between the discourse participants. Lyons (1999:3) asserts that the use of the definite article is not conditioned by the hearer's personal knowledge of the referent. He discusses the following example utterance:

(17) 'The president of Ghana is visiting tomorrow.'

Lyons explains that the hearer of the utterance in (17) may be aware that Ghana has a president but s/he may not be acquainted with the specific person who is the president of Ghana. In such circumstances, Lyons asserts, familiarity is not a notion that defines definiteness fully. He points out that such examples gave rise to the acceptance of the notion of identifiability. However, the introduction of the notion of identifiability did not entail the abandonment of the notion of familiarity. He argues that familiarity remains the fundamental meaning of definiteness. In regard to the identifiability notion, Lyons (1999) states that the occurrence of the definite article denotes an indication to the hearer to locate the referent in the context. He maintains that the notion of identifiability provides a wider scope than does familiarity for the use of the definite article. Lyons (1999:7) discusses the following example for which the occurrence of the definite determiner in utterances does not entail definiteness well:

(18) '[Nurse entering operating theatre]'
'I wonder who the anaesthetist is today.'

Lyons asserts that not only the hearer but also the speaker of the utterance in (18), cannot identify the anaesthetist in the subject. He points out that if the speaker would be aware of the anaesthetist in the subject he would not make such utterance. He maintains that the use of the definite article in the utterance above indicates that the speaker and the hearer have a shared knowledge that there is only one anaesthetist in the discourse context. Thus Lyons contends that the use of the definite article is associated with the uniqueness of the referent in the context and not identifiability. In terms of uniqueness, Lyons (1999) states that the NP is assumed to be definite when the hearer cannot identify the referent in question but can uniquely associate one

referent as satisfying the description used for the noun phrase. He maintains that uniqueness is generally not absolute, although it can be understood in the discourse context. He explains that the noun phrase can be indefinite when the speaker can associate a referent that satisfies the description of the referent. However, Lyons (1999) points out that the notion of uniqueness cannot account for the definiteness reading with plural count nouns and mass nouns. In this regard, Lyons (1999) posits another notion namely the inclusiveness hypothesis.

In regard to mass and plural NPs, Lyons (1999) proposes that definiteness or indefiniteness is usually determined in a situation where expressions occur, and includes their pragmatic meanings. This means that the reference is to the whole of the mass in the situation which satisfies the descriptions. Lyons contends that the definiteness of the referent is viewed in a two-fold way, namely identifiability which includes familiarity, or inclusiveness which includes uniqueness. These two notions can obtain together, or separately. With reference to Hawkins (1978), Lyons (1999) argues that the inclusiveness factor denotes totality rather than uniqueness. He posits that Hawkins's inclusiveness hypothesis offers the most convincing and general explanation for the use of the definite article. He asserts that inclusiveness may include uniqueness and therefore, can be used well in the context where the notion of identifiability does not apply well. Lyons (1999) also explored the notion of specificity. He assumes that a nominal expression is specific if the hearer has a particular referent in mind. In contrast, the nominal expression is interpreted as non-specific when the hearer does not have the referent in question in mind. Lyons maintains that specificity can obtain with definite or indefinite nominal expressions. Thus, the nominal expression can encode the semantic feature of [+specificity, +/-definiteness].

In research assuming the Minimalist framework, there have been various studies that address the question of how phi-features, definiteness, and case can be satisfactorily accounted for. In this regard, Fakhri (2007) discusses syntactic models such as Agree Model (Chomsky, 2000; 2001) and the Feature Sharing Model (Frampton and Gutmann (2006); Pesetsky and Torrego (2007) in arguing that there is no model other than the Feature sharing framework that can account for phi-features, definiteness, and Case satisfactorily in Arabic adjectival agreement. He dismisses Chomsky's Agree Model for having unresolved flaws which render it inadequate for accounting for phi- (person, number, gender) features, definiteness, and Case in adjectival agreement. Fakhri asserts that Chomsky (1991) proposed that different projections account for phi-features and

Case. In Chomsky's model, case is assigned when a DP moves to [Spec-TP], while the agreement is established when a DP moves to [Spec-AgrP]. In addition, he states that in Chomsky's model Case and agreement are assigned under c-command via the same Agree operation. The head, T, checks the Case of a DP with a matching Case feature and, in turn, that DP checks the agreement features on T. Fasih argues that Case and phi-features are distinct probes on T, which means that the individual features can probe independently. Thus, the values of the same features on different nodes would have to be treated as belonging to different formal objects that match in value. In contrast, Fasih (2007) advances the Feature Sharing Model in asserting that the value of a feature on one node depends on the value of the same feature on another node. He argues that the Feature Sharing Model licenses valuation of one instance by valuation of the other. With reference to the Arabic adjectival agreement, Fasih proposes that the head of the adjectival construct state probes for the unvalued feature of definiteness, resulting in the occurrence of the two unvalued definite [def] features as a single shared feature.

2.4.7 Information Structure

Research on information structure can be traced back to the Prague school linguistics. According to Féry and Ishihara (2016), information structure research can be traced to Mathesius (1975), who is presumed to be the father of modern Information Structure research. As noted by Lambrecht (1996) and Féry and Ishihara (2016) the terms psychological subject and psychological predicate were changed to the notions of 'theme' and 'rheme', respectively by Mathesius (1975). Féry and Ishihara (2016) state that the term 'theme' was interpreted by Mathesius (*ibid.*) as what the sentence is about and the term 'rheme' was interpreted as what is being said about the theme. According to Féry and Ishihara (2016), these terms are rendered in the current information structure research as the topic and focus, for theme and rheme respectively. Féry and Ishihara state that the term information structure was initially used by Halliday (1967/68), who interpreted focus as what is not being traceable from the previous context. Féry and Ishihara (2016) point out that Halliday defined newness as what may lie in the speech function, or as a matter of contrast with what was uttered before.

Lambrecht (1996) considers information structure as the level that describes the way the speaker structures the utterance to fit the context of conversations. Lambrecht's notions of focus and topic invoke mental representations that incorporate the psychological paradigms of

identifiability and activation. In regard to the notion of a topic, Lambrecht (1996) posits that the topic is ‘the pragmatic category identifiable and activated in the minds of the discourse participants’. He maintains that expressions that encode topics are active in the mind of the hearer, while the referent in the hearer’s mind can be active, semi-active, or inactive.

In discussing the view of Krifka (2008) that information in the mind of the human being is structured in a way that it can be said to be about something, Féry and Ishihara (2016) argue that the notion of topic can be associated with how information is kept in the mind of interlocutors, and how it is organized in conversation. They further state that Krifka's definition is always discussed as the aboutness topic. Similarly, Song (2017) asserts that the term topic denotes what the expression is about. Song maintains that the topic is all about old information conveyed in the utterance which the utterer expects to be familiar to the hearer audience. Thus, an item is the topic of the utterance of the speaker who wishes to probe the knowledge of the hearer or to get new information from the hearer. Furthermore, Song (2017) assumes that the utterance can bear more than one focus which is referred to as a primary and secondary topic. Van Gelderen (2013) asserts that the topic is concerned with entities that have a certain degree of activeness in the discourse. From this point of view, the topic is viewed to be typically about definiteness.

Lambrecht (1996) posits two types of focus, namely information (presentational) focus, and identification (contrastive) focus, as focus structure to which he refers as the scope of a sentence under which focus falls. He points out that every sentence has an element on which information focus falls, referring to the three elements of argument, predicate, and the whole sentence. He distinguishes three categories of focus, namely argument focus, predicate focus, and sentence focus.

In defining the notion of focus, Krifka (2008) refers to the studies of Rooth (1985, 1992) who posits that focus is defined in terms of the theory of alternative semantics. In this regard, Krifka (2008:6) defines the notion focus as follows:

- (19) *‘Focus indicates the presence of alternatives that are relevant for the interpretation of the linguistic expression.’*

Krifka points out that the above definition is general in the sense that does not address the way focus can be encoded. He posits that such a definition is compatible with various focus

encodings in that such a definition entails that terms like ‘focus marking’ and/or ‘focus construction’ should be used merely to indicate that ‘alternatives’ are essential for interpreting focus. Since the definition given in (20) above lacks the features of alternatives appropriate for interpretation, he further states that these alternatives may be alternatives of form or denotation. In this regard, Krifka (2008:8) proposes the following more precise definition:

- (20) *‘A property F of an expression α is a Focus property iff F signals (a) that alternatives of (parts of) the expression α or (b) alternatives of the denotation of (parts of) α are relevant for the interpretation of α .’*

In this definition, Krifka refers to (a) as expression focus, and to (b) as denotation focus. He states that expression focus affects various aspects such as the kind of selection of words. He asserts that denotation focus is interpreted on the level of denotations, relating to alternative denotations of complex expressions. He further states that denotation focuses on the expression α giving the meaning that $\|\alpha\|$ leads to the assumption of a set of alternative meanings that play a role in the interpretation of the constituent in which α occurs. Following Krifka (2008), Féry and Ishihara (2016) assert that such definition allows various ways of focus marking, as there are various ways to mark the presence of alternatives, such as pitch, word order, tone, and clefts. Song (2017) defines focus as the most informative part of the utterance, bearing the information that the speaker takes to be new and non-recoverable for the hearer. He further states that focus refers to what is introduced more newly and/or given more importance in the utterance by the speaker which is considered to be the part of the assertion or the proposition which the speaker expects to know because of hearing the utterance. With regards to the notion of alternative sets, Song (2017) refers to Krifka's (2008) notion of contrast, which he considers as a cross-cutting element of information structure, which relates to the notion of an alternative set. He maintains that contrast is used as a set of substitutes that can be comprehended as either topic or focus. Song (2017) posits for English, that contrast is accompanied by either topic or focus, assigning two sub-categories: contrastive focus and contrastive topic.

The notion of contrast is also explored by Repp (2010). She asserts that contrast can be articulated from a semantic-pragmatic point of view. She proposes that contrast be defined as a cover term that subsumes certain entities that are similar but have differences because the term contrast has been used for entities that have certain similarities. The question arises of how to distinguish contrast from the notion of focus in the alternative-indicating sense. In defining

contrast, Repp discusses aspects used to distinguish focus from contrastive focus. Such aspects are the size of the alternative set, explicit mention versus implicit supposition, identifiability of alternatives, and the requirement to exclude alternatives. She demonstrates that contrast is different from focus in the sense that the latter evokes alternatives while the former is associated with alternatives that are already explicit, hence contrasts between alternatives that are already explicit to interlocutors, but focus on an item to implicate its alternatives. In terms of the size of alternatives and identifiability of elements, Repp asserts that contrast is connected to a restricted set of alternatives, whereas focus has an open set of alternatives. Furthermore, she claims that contrast is associated with the exclusion of some alternatives, but that focus is not. Extending the works of scholars like Skopeteas and Fanselow (2006), Repp (2010) provides evidence that attests that the debate over whether contrast triggers syntactic movement, or not is inconclusive. She shows explicitly how Horvath (2010) and Skopeteas and Fanselow (ibid.) disagree with the claim that contrast as a pragmatic feature triggers syntactic movement (displacement).

Repp (2016) demonstrates that the notion of contrast is relatively difficult if the discourse context is omitted. She refers to the English example Peter went to Rome; Mark went to London in positing that the alternatives that contrastive elements evoke are not sufficient to define the notion of contrast. She contends that the alternatives may also be evoked by the discourse relation that links the discourse segments encompassing the contrastive elements. In exploring the notion of contrast, Repp (2016) proposes a three-fold distinction, namely explicit alternative, explicit alternative set, and implicit alternative. These distinctions are proposed to be concerning grammatical reflexes of contrast. Repp posits that the explicit alternative obtains when the referent contrasts with another substitute which is overtly marked in the discourse of conversation. The explicit alternative set involves contrasting a set of equal alternatives that are overtly marked in the context. In case of the implicit alternative notion, the referent contrasts with an equal substitute which is covertly known by interlocutors in the discourse context. Thus, the contrasting alternative, or a set of alternatives, is not mentioned in the utterance but can be understood if the discourse participants have mutual knowledge of the particular alternative or set of alternatives.

2.5 Summary

This chapter has discussed key principles and properties of the various theories constituting the multi-perspective syntax-interfaces approach employed in this dissertation. It has discussed features of the relationship between syntax and semantics. After a brief discussion of the concept of the syntax interfaces, the chapter outlined the developments that occurred in generative syntax, in which Minimalist Program and the postulation of the DP-Hypothesis have been discussed. The chapter briefly discussed Rizzi's (1997) Cartographic framework that invokes the information structural notions of focus and topic. In regard to the notions of focus and topic, the chapter discussed Krifka's (2008) definitions which posit that focus and topic are defined in terms of the speaker's belief about the addressee's attitude as long as s/he can identify them. Concerning (in)definiteness and (non-)specificity, the chapter discussed Lyons' (1999) notions of identifiability, familiarity, inclusiveness, and uniqueness. The main view arising from the review of definiteness and specificity is that these notions are scalar and sometimes a matter of degree. An NP can be more definite/specific, or less definite/specific, depending on a host of factors.

The chapter reviewed research on the postulation of the DP-Hypothesis in the Minimalist Program which serves as the framework for the investigation of the igiHa nominal expressions that are argued in this dissertation to project DP above NP. In addition, to the Minimalist Program, this chapter discussed the theory of definiteness and specificity of Lyons (1999) for accounting for interpretation of the Determiner head in the DP. This theory posits the notions of familiarity, identifiability, uniqueness, and inclusiveness to establish the (in)definite and/or (non-)specific interpretations i.e., semantic inference of DPs. The principle of definiteness and specificity, which are currently the prominent issues in research on the syntax-semantics interface, will be invoked in examining and analyzing 'the (in)definiteness and (non-)specificity' interpretations of igiHa DPs.

The chapter furthermore discussed the Information Structure (IS) theories of mainly Lambrecht (1996) and Repp (2010, 2016) which the Cartographic studies framework invokes in positing the Focus Phrase and Topic Phrase in the left periphery of DPs. These views will be employed in the current study in examining and analyzing the interpretation of igiHa DPs with various nominal modifiers, with and without a lexical head, respectively. It will be demonstrated in chapters Four, Five and Six that the (obligatory or optional) occurrence of the pre-prefix in the

agreement inflection of some of the igiHa nominal modifier represents the structural occurrence of a functional category Determiner. This functional category will be argued to denote definiteness, specificity, and contrastive focus, invoking for the latter Repp's (2010, 2016) proposals of explicit alternative, explicit alternative set, and implicit alternative set.

CHAPTER THREE

PERSPECTIVES FROM PREVIOUS RESEARCH ON THE NOUN PHRASE AND DETERMINER PHRASE SYNTAX

3.1 Introduction

The previous chapter presented the theoretical framework that is employed in this study to investigate igiHa nominal expressions. It discussed four theories that are interrelated, including the generative syntax Minimalism Program (MP), that constitute the syntax-interfaces approach adopted in this study. In recent generative research, the notion of syntax interfaces in the analysis of nominal expressions has drawn considerable attention among scholars. In continuation of the discussion on these phenomena, this chapter aims to review selected studies on the NP/DP syntax in article-less languages. This chapter aims to explore views from the research of the morpho-syntactic analysis on the Determiner phrase syntax, and the related semantic interpretation of DPs in languages with no overt articles. The chapter has two main sections, wherein the first section reviews studies on the word order of elements constituting the nominal domain in African languages, and the second section reviews studies concerned with presenting a morpho-syntactic and semantic account of the DP in African languages from a generative perspective. Since the research studies on DP syntax in article-less languages are numerous, especially for European languages, it is not possible to review all research relevant to this study. I select only some studies that relate to key issues. This chapter discusses research that demonstrates that languages with no overt articles do require the DP analysis, similarly to the view advanced for languages with overt articles. Thus, these studies argue for a universal DP across languages.

This chapter is organized according to the following section. Section 3.1 is the introduction, which gives a brief outline of the chapter. Section 3.2 provides a review of typological studies on the noun phrase from selected African languages. Section 3.3 presents a review of selected studies on the DP syntax of article-less languages, and section 3.4 presents a review of selected perspectives on the syntax-semantic interface. Section 3.5 discusses perspectives on the syntax-pragmatics interface and section 3.6 summarizes the central issues raised in the chapter.

3.2 Descriptive and typological studies on the NP in African languages

This section reviews typological studies concerning the nominal domain in selected African languages. The section aims to examine the categories that constitute the nominal domain in Bantu languages. Furthermore, it explores the (co)occurrence of these elements in the nominal domains in various Bantu languages. The discussion of this phenomenon provides a base for the investigation of the morpho-syntactic analysis of the Determiner Phrase syntax of *igiHa* (JD66) in the following chapters.

In respect to languages that are head-first, Van de Velde (2005) states that the head of a syntactic unit occurs before its modifiers. He maintains that although being head-first, many Bantu languages exemplify exceptions to this strict order in that they demonstrate freedom in the positioning of post-nominal modifiers in different pragmatic circumstances at the level below the clause. He states that this freedom does not syntactically mean the total absence of restrictions and does not change the fact that the word order in the nominal expression is subject to pragmatic constraints.

Van de Velde (2005) demonstrates that Bantu languages vary in the placement of demonstratives. Considering the way demonstratives are positioned with respect to the noun, he demonstrates that Bantu languages fall into three groups. First, he states, in some languages the demonstrative is regularly positioned before the lexical head noun. Such languages are rare, and they include Kwiri (A22) and Duala (A24). Second, in some languages, the demonstrative is regularly positioned after the lexical head noun, for example, Lundu (A11) and Kundu (A12). Third, Van de Velde points out that there are Bantu languages in which the demonstrative can be positioned either pre-nominally or post-nominally. These languages include Nkore (J13), Xhosa (M41), and Bemba (S42). He points out that, in some Bantu languages, pre-nominal and post-nominal demonstratives encode different pragmatic meanings. Van de Velde asserts that in some Bantu languages, the pre-nominal demonstratives function as demonstrative proper, but post-nominal demonstratives function the equivalent of the English definite article.

Van de Velde (2005) presents an account of the reasons why Bantu languages differ in respect to the position of demonstratives in terms of three views. First, he argues that some of the demonstratives that are positioned after the noun are structurally not true dependents of the noun. He states that true demonstratives are normally pre-nominal unless they are meant to denote

certain pragmatic meanings to the referent. Thus, Van de Velde argues that the variation in the positioning of demonstratives is partial since some demonstratives are true demonstratives, whereas others are merely adnominals (postposed), with each category serving a different purpose. The pre-nominal demonstratives serve as ‘textual anaphora’ in the sense that they denote referents that have been previously mentioned in the discourse context. By contrast, demonstratives that follow the lexical head noun are termed as either exophoric or instances of substitution anaphora where they are used to substitute a phrase that has been used in the prior discourse context.

In the second instance, Van de Velde proposes that some pre-nominal adnominal demonstratives developed from pre-nominal non-adnominal demonstratives. Van de Velde (2005) considers this to be the weakest hypothesis and he admits to having no empirical evidence to support this view. Van de Velde thirdly asserts that Bantu languages vary in terms of demonstrative positioning because demonstratives are in complementary distribution with the augment. Thus, in pre-prefix (augment) languages, Van de Velde (ibid.) suggests that demonstratives occur in the postposition. He refers to Kinyarwanda and Kirundi, (two languages that are closely related to igiHa) as examples to support his view.

- (1) Abagabo aba baragòye [Kinyarwanda]
 a - ba-gabo aba ba - ra - gòr - ye
 Ppfx-2-husband DEM AgrS-PRES-difficult-PERF
 ‘These husbands are difficult.’

According to Van de Velde (2005), the Determiner pre-prefix is deleted in the context where the demonstrative occurs before the lexical noun, just because the two categories serve the same function. However, in Chapter Four of this dissertation, I argue that for certain pragmatic purposes in igiHa, the pre-prefix may be retained with a demonstrative in the pre-nominal position in igiHa.

In a study on of the elements constituting the nominal domain in Kimashami, Kiswahili, Kinyakusa, Runyambo, Kisafwa, igiHa, and Kisukuma, Rugemalira (2007) addresses three issues. First, he examines elements that modify the noun and the order of those elements. Secondly, he examines the co-occurrence of elements in the modification structure, and thirdly, the relevant criteria for categorizing the dependents of the NP. He addresses the question of whether there is a saturation point in the modification structure. Rugemalira (2007) classifies the

noun dependents in regard to their morphology, syntax, and semantics. He groups them into Determiners, including possessives and demonstratives, and modifiers, including numerals, ordinals, and quantifiers. For instance, in Kimashami and igiHa, Rugemalira (2007) points out that, canonically, the demonstrative occurs in the post-nominal position. He maintains that in Kiswahili and Kinyakyusa the possessive occurs immediately after the lexical noun. With reference to Sukuma, Rugemalira (2007) posits that neither the possessive nor the demonstrative occupies a fixed position in the NPs of some Bantu languages. Thus, that either of them can precede the other. When they co-occur with other elements of the NP, Rugemalira (2007) posits that none of these is adjacent to the noun.

Lusekelo (2009) examined the structure of NP in Kinyakyusa by focusing on the order of the elements in the NP. He discusses the nominal modifiers occurring in the nominal domain, their co-occurrence, and their word order. The NP elements examined in this study include adjectives, possessives, numerals, demonstratives, quantifiers, and intensifiers. Lusekelo (2009) groups these elements into determiners (possessives and demonstratives), modifiers (quantifiers and numerals), and the categories distributives and genitives.

In regard to the order of the nominal modifiers in the NP, Lusekelo (2009) asserts that the ordering of elements in the Kinyakyusa NP is relatively free since some elements, e.g., numerals, can be placed anywhere after the possessive/demonstrative when co-occurring with other elements. He states that intensifiers and relative clauses cannot co-occur, but demonstratives and possessives can co-occur, although not frequently. When a possessive and demonstrative co-occur, either of them can be adjacent to the head. Lusekelo (2009) thus differs from the view of Rugemalira (2007) that only possessives occur immediately adjacent to the head in Kinyakyusa.

Another typological study that provides a morpho-syntactic description of the Kibembe nominal phrase is that of Iorio (2011). He states that the nominal expression of Kibembe is comprised of bare nouns, pronouns, demonstratives, adjectives, quantifiers, prepositions, relative clauses, and genitives. Iorio posits that the canonical word order in the Kibembe NP permits only two possible orders for a noun phrase encompassing all classes of modifiers namely, ‘Demonstrative-Noun-Possessive-Quantifier-Adjective-Genitive’, or, ‘Demonstrative> Possessive-Noun-Quantifier-Adjective-Genitive’. However, Iorio (2011) does not provide the possible

interpretations resulting from the movement of the possessive from a post-nominal to a pre-nominal position.

Möller (2011) investigates several elements that may appear in the nominal domain of chiKwere. She also investigates the ways these elements agree with their nominal head and their co-occurrence in the nominal domain. According to Möller (2011), the noun of chiKwere is formed by an optional pre-prefix, noun class prefix, and a stem. She points out that the pre-prefix occurs occasionally before the noun class prefix, and before the agreement prefix of possessives. She states that the pre-prefix does not occur in all noun classes, although she does not point out which noun classes specifically restrict its occurrence. Regarding the semantic and pragmatic functions of the pre-prefix in chiKwere, Möller (2011) relates it to definiteness and specificity, although she concedes some uncertainty. She associates it with definiteness and specificity similar to the pre-prefix in the neighboring language chiKagulu. Petzell (2003:69) posits that the function of the pre-prefix in chiKagulu is to an extent associated with the semantic features of definiteness and specificity, whereas its (non-)occurrence is associated with topicality.

With respect to the (co-)occurrence of nominal dependents in chiKwere, Möller (2011) asserts that the demonstrative often precedes the possessive when they co-occur in the same NP. She states that the preferred word order for an NP exhibiting the co-occurrence of the demonstrative and the possessive is N-DEM-POSS.

Taji and Mreta (2017) examine the morpho-syntactic structure of the NP of Shimwela, in particular the syntactic properties of the elements occurring within an NP domain with respect to their order of occurrence, co-occurrence, and recurrence. They distinguish two categories of the elements occurring within the nominal domain of Shimwela, namely determiners and modifiers. Demonstratives, possessives, and distributives are categorized as determiners, whereas adjectives, relatives, quantifiers, numerals, and associative are viewed as modifiers. Taji and Mreta posit that the structure of the Shimwela demonstratives is comprised of an initial vowel **a-**. With regard to the function of demonstratives, they state that Shimwela demonstratives express (non-)proximity and definiteness. They assert that the Shimwela demonstratives occur in three forms: proximal demonstratives (morphologically occurring as **a-root-FV**), medial demonstratives (**a-root-o**), and distal demonstratives (**a-root-la**). The following examples (2 a-c) from Taji and Mreta (2017:23) illustrate these forms:

- (2) a. **aju** mwáánâ **ju**
 aju mw-áánâ ju
 DEM 1- child DEM
 ‘This child’
- b. **ajo** mwáánâ **jo**
 ajo mw-áánâ jo
 DEM 1-child DEM
 ‘That child’
- c. **ajula** mwáánâ **jula**
 ajula mw-áánâ jula
 DEM 1-child DEM
 ‘That child’

Taji and Mreta assert that demonstratives can occur simultaneously in both pre-nominal and post-nominal positions. They posit that the post-nominal demonstrative is phonologically reduced by dropping its initial vowel. The post-position demonstrative is obligatory whereas the pre-nominal demonstrative is optional. Taji and Mreta state that the pre-nominal demonstrative is interpreted as definite. They maintain that the absence of the pre-nominal demonstrative is possible when the interlocutors are familiar with the referent which may have been mentioned earlier in the discourse. Hence, they propose that the post-nominal demonstrative which is phonologically reduced denotes anaphoric reference. Consider the following example (3):

- (3) Mwáánâ jwánshóoko **jula**
 mw-áánâ jwá-n-shóoko jula
 1-child ASS-1-small DEM
 ‘That small child (we talked about)’

With regard to the word order, Taji and Mreta discuss several orders of the dependents in the Shimwela NP domain. Taji and Mreta assert that in Shimwela, certain elements in the nominal domain strictly occur in one position, whereas others exhibit flexibility in order. They state demonstratives, distributives, possessives, and interrogatives occur in a fixed position whereas adjectives, numerals, quantifiers, relatives, and associative elements exhibit a flexible order. They contend that due to certain co-occurrence and recurrence constraints all these modifiers cannot co-occur. The longest NP in Shimwela is limited to six dependents only, with two possible structures, namely N-POSS-QUANT-NUM-ORD-ADJ-REL, and/or N-POSS-QUANT-NUM-ASS-ADJ-DEM.

3.3 Previous studies on DP syntax in selected article-less languages

This section reviews selected studies on DP syntax within the generative syntactic approach. In particular, the section discusses key issues raised in research on the nominal domain of article-less languages. The issues discussed are associated with the morphosyntactic and semantic properties of the DP in so-called article-less languages. The section is subdivided into two main sub-sections, the first of which concerns studies from languages other than African languages, and the second which concerns studies on African languages.

3.3.1 Perspectives on DP syntax from studies on article-less languages other than African languages

This sub-section discusses selected studies that posit the DP projection above NP regardless of whether the language has overt or covert articles. Studies discussed in this sub-section posit that there is empirical evidence that European languages which are regarded as article-less languages give evidence for a DP analysis, similarly to languages with overt articles. Disagreement is evident among scholars, specifically between those who argue that the DP only occurs in languages that have articles, and those who argue that the DP analysis obtains for all languages, regardless of whether they have overt articles, or not. Lyutikova and Pereltsvaig (2015) examine data from Tatar, a Slavic language that has no articles. Tatar is closely related to the Turkish language, which has been claimed by Bošković and Şener (2014) to have no DP projection. The views of Lyutikova and Pereltsvaig are mainly based on an analysis focused on the syntax, semantics, and morphology of possessors and direct objects in Tatar. Lyutikova and Pereltsvaig (2015) argue that possessors appear either with or without a genitive case marker (among other case markers). They refer to those marked for a genitive case as **ezafe-3**, and those which are not marked for a genitive case are referred to as **ezafe-2**. Consider the following two examples from Lyutikova and Pereltsvaig (2015:300):

(4) a. **Ezafe-3**

Bala-lar-**nıŋ** alma-sı
 Child-PL-GEN apple-3
 ‘(the) children’s apple’

b. **Ezafe-2**

Bala-lar alma-sı
 Child-PL apple-3
 ‘Children’s apple’

According to Lyutikova and Pereltsvaig (2015), the genitive marker in the **ezafe-3** construction denotes the phrase a referential interpretation like that of construction headed by the article ‘the’ in English. They state that this referential interpretation is absent in the **ezafe-2** construction. They argue that, since the **ezafe-3** has a referential reading, it is structurally a DP headed by the genitive marker. As is argued by Ghomeshi et al. (2009), an article is not an exclusive element that defines a determiner, but referential inference is one among other ways, of defining a determiner. According to Lyutikova and Pereltsvaig (2015), the **ezafe-2** construction, on the other hand, is not a DP because it lacks a referential interpretation.

In respect to direct objects, particularly differential object marking, Lyutikova and Pereltsvaig (2015) argue that direct objects that are marked for accusative case are DPs since they exhibit a referential interpretation (just as the **ezafe-3** possessor). Their counterparts (those which are not marked for accusative case) are not DPs. They argue that the **ezafe-3** possessors and the accusative objects can move to higher positions in the phrase to check features, in particular possessor features and accusative features, respectively. They view this property as evidence to argue that Tatar, an article-less language, realizes DP projections.

Stanković (2014, 2017) examines Serbo-Croatian nominal expressions to determine whether the language realizes DPs. Serbo-Croatian (SC) is a Slavic language with no overt articles. Since SC is article-less, its bare NPs have often been viewed by scholars as being ambiguous concerning its structural representation as NP/DP projection. In regard to this debate Stanković (2014) argues for a DP analysis for SC as an article-less language. He provides empirical evidences in favor of the Split-DP analysis as posited by Alexiadou et al. (2008). According to Stanković, in SC, nominal expressions, spatial, temporal adjectives, and possessive adjectives can move to the pre-cardinal position to denote the specific inference of the referent, corresponding to other determiners. He maintains that the discourse-linked adjectives, similarly to ordinal numbers or /adjectives, and functional adjectives, such as **isti** ‘same’ and **pomenuti/navedini** ‘mentioned’ usually appear before the lexical head noun.

Stanković (2014) postulates that discourse-linked adjectives, similarly to spatial temporal and possessive adjectives such as **pomenuti/navedini** ‘mentioned’, and the identity adjective **isti** ‘same’ cannot be separated from the rest of the nominal domain. In this regard, Stanković assumes that the SC nominal domain is represented as a DP, where the Determiner (D) position

is occupied by a phonological empty element. This phonologically empty category may alternatively be occupied by a discourse-linked element that denotes a definite/unique/specific inference. Stanković demonstrates that spatial temporal and possessive adjectives, ordinal, and functional adjectives exhibit morpho-syntactic and semantic features in common with determiners, rather than with typical adjectives. He posits that SC determiners and adjectives constitute two distinct categories and that even some adjectives in SC exhibit properties more similar to determiners than adjectives. Stanković asserts that in SC there are certain determiner-like discourse markers (obligatory determiners) that denote referential definiteness/indefiniteness to the nominal expressions in certain discourse contexts. Based on the presence of these discourse markers, Stanković (2014, 2017) argues that SC projects a DP above NP, even though it lacks overt determiners. Thus, Stanković (2017) postulates that in SC adjectives such as **pomenuti** ‘(the) mentioned’, **navedeni** ‘(the) stated’, **imenovani** ‘named’ and anaphoric demonstratives, for instance, **ovaj** ‘this’, **taj** ‘that’ and **onaj** ‘that’ denote that an NP ‘points back’ to its referent expressed earlier in the discourse. Thus, they are used to give the NP a definite referential interpretation as illustrated in the following example:

- (5) a. *sajam košarke*
fair basketball
‘a basketball fair’
- b. *taj sajam košarke*
that fair basketball
‘this basketball fair’ [+DEF]

For bare NPs that are definite, e.g. those whose heads are proper nouns, certain indefinite discourse markers (indefinite pronouns) such as **jedan** ‘a(n), one’, **neki** ‘some’ yield an indefinite heading. Consider the following examples provided by Stanković (2017:265):

- (6) *Prvi put u istoriji Eurosonga* {jedna zemlja/ zemlja}
first time in history Eurosong-GEN one country/ country
- je izbačena sa takmičenja.*
is expelled from contest.
‘For the first time in the history of Eurosong, {some country/
the (our) country} is expelled from the contest.’

Concerning the semantic difference between the nominal expressions **zemlja** and **jedna zemlja**, Stanković (2017) asserts that the bare noun **zemlja** ‘our/the country’, is essentially

definite in SC. It becomes indefinite if the indefinite pronoun **jedna** is introduced as **jedna zemlja**, which means one/some country (not specifically known). In discussing that the discourse markers which occur in these contexts are obligatory determiners, rather than some different element, Stanković (2017) demonstrates that they normally occur before the noun, preceding other elements such as cardinal numbers, superlatives, and other adjectival modifiers. Thus, he states they occur in a position higher in the syntactic structure of the NP, hence they head the projections. Stanković concludes that SC has DP projections even though it is an article-less language.

Syed and Simpson (2017) examine data from Bangla to determine the status of nominal projections as DPs or NPs. Their study contributes to the debate on whether article-less languages realize DP projections. They argue that, although Bangla lacks overt articles, it projects a DP above NP because it has certain functional categories that project DPs. According to Syd and Simpson, the argument that Bangla is a DP language is firstly based on evidence that special order alterations (of the NP elements) occur that indicate specificity or definiteness. Syed and Simpson demonstrated that the canonical order of the NP elements in Bangla is Number - Classifier - adjective - Noun. They assert that this canonical order gives rise to an indefinite interpretation, but once any one of the classifier complement is moved leftwards, the resultant structure produces a definite interpretation.

3.3.2 Perspectives on DP syntax from studies on African languages

This sub-section presents a review of selected studies on African languages that favor a DP analysis for the nominal domain. Aboh (1998) examines the DP structure of Gungbe, a language from the Gbe group spoken in West Africa. Aboh states that the Gungbe DP has a head-initial internal structure with several projections such as a Demonstrative Phrase, Number Phrase, and Numeral Phrase. He asserts that the determiner projection in Gungbe bears a specificity marker, and the number projection bears a number marker. Aboh states that the Gungbe determiners strictly occur post-nominally and that the Gungbe DP structure permits the occurrence of the noun and its modifiers, including the adjective, the demonstratives, the determiner, and the number marker in the fixed order noun - adjectives - demonstrative - determiner - number. Example (10), from Aboh (1998:2), illustrates the Gungbe DP word order:

- (7) Távò xóxó éhè ɔ lé
 Table old Dem Det Num
 ‘These (specific) old tables.’

In the case where the determiner occurs in the post-nominal position, Aboh (1998) asserts that the modified noun is interpreted as specific, as it refers to a referent that is necessarily established in the previous discourse. This view relates to Lyons's (1999) principle of definiteness, in terms of familiarity. He contends that the Gungbe DP is not the only entity that exhibits a specificity marker, and that the number marker may also bear a specificity marker (determiner). In this regard, the specificity marker precedes the number marker in a fixed order, as exemplified below:

- (8) a. Távò xóxó ɔ lé
 Table old Det Num
 ‘The (specific) old tables’
 b. *Távò xóxó éhè lé ɔ
 Table old Dem Num Det

Aboh posits that Gungbe DP can include the ‘wh- marker **té**.’ He maintains that the wh- marker **té** modifies the lexical head noun in its post-nominal position. In contrast to the number marker **lé**, the wh- marker may not co-occur with the specificity marker **ɔ**. He invokes the impermissibility of the co-occurrence of the wh-marker and the specificity marker as evidence for the view that the two elements do not compete for the same position.

Aboh (1998) posits that the Gungbe DP realizes a number mark simultaneously with the determiner marker. He states that the two elements do not compete for the same position, but are realized in different head positions in the DP structure. Both the determiner and the number marker occur with other categories, including demonstratives and articles, that are inserted in the determiner position. The number marker and the demonstrative in Gungbe co-occur strictly in the order demonstrated in (10) above. Thus, Aboh argues, the determiner and the number marker are the two major categories of the determiner system which represent the heads of two interconnected projections with the features [+/-specific] and [+/-plural] respectively, and the determiner is represented in the highest projection while the number marker is represented in the lowest functional projection. Aboh therefore asserts that the Gungbe DP is a phrase that includes a sequence of functional heads that project D° , and that D° is encoded by the specificity marker **ɔ**

and number marker **lé**. Since the specificity marker and the number marker occur adjacently, other modifiers like demonstratives, adjectives, and numerals moved to the specifier positions of the different functional projections labeled as Demonstrative Phrase and Numeral Phrase.

With reference to the study of Rizzi (1997), Aboh (1998) states that the two interrelated projections (D° and Num°) are morphologically realized in that D° encodes specificity, and Num° encodes number specification. He maintains that in the Gungbe DP there is no morphological structure that encodes the feature non-specificity. Thus, determinerless noun phrases are construed as (in)definite and non-specific. Since non-specific and specific nouns in Gungbe appear to have the same distribution, Aboh (1998) states that it is not possible to conclude that the Gungbe D° is occupied by an overt or null morpheme. He argues that in the discourse context where D° has the feature [+specific], it is realized by an overt morpheme **lo**. On the other hand, it is marked as [-specific] when realized by an empty morpheme.

Aboh argues that the number marker **lé** is the overt realization of the feature [+plural] on the Num° while the feature [-plural] is realized by an empty morpheme, as demonstrated in the following example from Aboh (1998:26):

- (9) a. távò
 'table'
- b. lávò lé
 table plural
 'tables'

In regard to the Split-D Hypothesis, Aboh (1998) proposes that the Gungbe pronominal system supports Kayne's (1975) and Cardinaletti and Starke's (1991) tripartition theory. Thus, Aboh identified three varieties of pronouns in the Gungbe DP structure. He identifies, firstly, strong pronouns, which can co-occur with demonstratives, adjectives, and numerals. Aboh (1998) states that first, second, and third person pronouns exhibit the morphological structure that indicates Num° which manifests number markers by default. Consider the following examples from Aboh, (1998:52):

- (10) a. mílé
 mí- lé
 1Person- Num
 'We'

b. mǐlé
 mǐ- lǐ
 2Person- Num
 ‘You’

c. yǐlé
 yǐ- lǐ
 2Person- Num
 ‘They’

The first, second, and third personal pronouns singular are suffixed with the plural mark **lǐ** to realize their plural forms. From the justifications above, Aboh argued such kinds of pronouns to be full DPs.

Aboh (1998) identifies weak pronouns as a kind of pronominal variety in the Gungbe DP structure which seems to lack strong pronouns. He identifies the weak pronouns as D-elements only because they can project the categories DP and NumP. Otherwise, they would not, since they cannot co-occur with demonstratives, adjectives, and numerals resulting from the absence of the categories DemP and Numeral Phrase (NralP). Aboh points out that weak pronouns cannot occur with specificity and number markers. Thus, in the Gungbe DP structure, weak pronouns are specified for number and moved to D° i.e., Num° - to - D° movement. Aboh asserts that the object clitic pronouns are the weakest of all three kinds of pronouns. Thus, he analyzes the object clitic pronouns as intransitive determiners because they manifest a DP which only realizes the head D°. Aboh concludes that Gungbe object clitic pronouns lack the projection NumP and the projections that are ordinarily present in full DPs.

Aboh (2004) furthermore, explores the topic-focus realization within D. He states that the topic and focus are also encoded within the nominal expression although these are generally viewed to be clausal properties. He asserts that the D-system involves two projections, namely the topic and focus, whose specifiers contain the fronted topic and focus constituents, and whose heads are morphologically realized by determiners or articles. In regard to the positions of the TopP and FocP in the D-system, Aboh (2004) argues that these elements project between the highest projection of the D-system, i.e., DP, and the lowest projection of the D-system i.e., NumP.

The DP syntax of Xhosa is examined by Visser (2008). In this article, Visser addresses the morpho-syntactic realization of indefiniteness and specificity in isiXhosa. She explores the interaction between syntax, pragmatics, and semantics in the interpretation of definiteness or specificity. She examines three types of constructions. First, clauses whereby an Object Agreement Affix (OAA) co-occurs (or does not co-occur) with an Object Affix (OA) in the noun phrase; second, NPs with pre-nominal demonstratives in occurrences where the pre-prefix of the lexical head noun is absent or present; and third, nominal modifiers which are inherently neutral regarding the semantic feature of (in)definiteness. Based on the analysis of the data, Visser (2008) argues that the noun class prefix is a functional category determiner that projects a DP. She also argues that the morpheme-**a** occurring on the inflection of nominal modifiers that are inherently neutral regarding semantic features of (in)definiteness and (non-)specificity in isiXhosa is the determiner that projects DP above NP.

Concerning the first type of construction, Visser (2008) demonstrates that when the OAA co-occurs with the OOA in positive clauses, the latter encodes specificity but when the OOA does not co-occur with the OAA, no specificity is encoded. Thus, she states, that the noun pre-prefix (nominal class pre-prefix) is a determiner that encodes specificity.

- (11) a. Ndingafumana isiselo?
 Ndi - nga-fuman-a isiselo
 AgrS(1s)-can-get-FV cold drink
 ‘May I get a/the cold drink?’
- b. Ndingafumana siselo?
 Ndi- nga-fuman-a siselo
 AgrS(1s)-may-get- FV cold drink
 ‘May I get (any) cold drink?’

In regard to the second type of construction, Visser (2008) proposes that the head noun lacking a pre-prefix occurring with pre-nominal demonstratives (e.g. **aba, lo**) do not encode any specificity e.g. **aba bafazi** ‘these women: **lo mfazi** ‘this woman). These nouns are definite but non-specific. However, when they occur with a nominal pre-prefix, the nominal expression acquires a specific interpretation. [**aba abafazi** ‘these (specific) students’: **lo umfazi** ‘this (specific) woman]. This she invokes as evidence for the view that the Xhosa noun pre-prefix is a determiner that heads a DP.

Visser (2008) proposes that the nominal modifiers which are neutral in terms of definiteness/specificity, e.g. adjectives, nominal relative, can denote specificity or definiteness only when their nominal agreement prefix is assimilated with the morpheme-**a**, which is a determiner derived from the stem of the demonstrative (**I**)**a**. Hence, these nominal modifiers are headed by the determiner (the morpheme-**a**) which projects DP above NP. In the following example, a clausal relative is headed by the morpheme -**a** which is fused with the agreement prefix of the adjective -**hle** ‘beautiful’.

- (12) Umfazi unceda umntwana omhle olusizi ogulayo
 umfazi u-nced-a umntwana om(←a+m)-hle o(←a+u)-lusizi o(←a+u)-gul-a-yo
 woman AgrS-help-FV child Det-Agr-beautiful Det-sad Det-AgrS-sick-FV-Rel
 ‘The/a woman helps the beautiful sad child who is sick’

Visser concludes that the morpheme **a-** that is also related to the demonstrative, is a manifestation of a functional category determiner. She, therefore, maintains that nominal modifiers such as the adjective, nominal relative, and clausal relative in isiXhosa occurring DP projection which is headed by the Determiner head **a-**. Visser posits that these nominal modifiers also have an agreement phrase functional projection, which is projected from the agreement prefix.

Ndayiragije, Nikiema, and Bhatt (2012) discuss with reference to the Kirundi pre-prefix the syntax–phonology interface. In the newly updated Guthrie's List by Maho (2009) Kirundi is indicated by the code JD62. According to Ndayiragije et al. (2012), the investigation of the Kirundi pre-prefix can be traced back to Meeussen (1959), who viewed the pre-prefix as a determiner, since it cannot co-occur with the prenominal demonstrative. Following Meeussen (1959), Bhatt *et al* (2007), and Ndayiragije *et al* (2009, 2010), Ndayiragije et al. (2012) maintain that the pre-prefix in Kirundi is considered to be a determiner that heads a DP. They argue that the gender agreement is merged between D and NP to accommodate phi-features associated with the noun as demonstrated as exemplified below:

- (13) [DP D [GendP Gend[NP]]]

Ndayiragije et al. (2012) contend that although the pre-prefix may semantically be neutral in terms of (in)definiteness, there are several other means through which the pre-prefix is realized as a functional category determiner. They postulate that, for instance, the pre-prefix that encodes

definiteness in some discourse contexts is obligatorily deleted when it precedes the negation **ntaa** to realize an indefinite reading. Ndayiragije et al. (2012) discuss the issue that the incorporation of N-to-V is cross-linguistically acceptable if there is no determiner occurring between V and NP. They assert that the pre-prefix in Kirundi displays noun incorporation in the prepositional phrase, whereby it is deleted between P and NP. They state that, in Kirundi, compound nouns derived from a V+NP structure do not permit the insertion of the pre-prefix between V-and-NP, and that vocatives never occur with pre-prefixes. Ndayiragije *et al* (ibid.) point out that many ikiRundi proper nouns are derived from common nouns by omitting the pre-prefix to yield them a more specific reading. In general, Ndayiragije et al. (2012) argue that the pre-prefix in Kirundi and probably in Bantu is considered as the determiner that heads the DP projection.

Bilola (2013) investigates the syntax of the nominal expression in Tuki by firstly positing that Tuki is an article-less language. According to Bilola, the Tuki bare nouns occur freely in various positions of the DP and they can exhibit a definite or indefinite reading. He explains that the indefinite reading is either existential or generic. He posits that bare nouns can encode an interpretation corresponding to the one that NPs in French take when they are introduced by definite or partitive articles. Furthermore, Bilola argues that bare nouns may also occur as referential or definite generics, in argument positions. Thus, he concludes that that Tuki is an article-less language with unclear bare singulars.

In addition to bare nouns, Bilola demonstrates that the Tuki DP may include a noun, a possessive determiner, a numeral, a locative reinforcer, and a demonstrative determiner. He argues that the Tuki DP represents an articulated nominal left periphery. Invoking the split-DP hypothesis, Bilola (2013) argues, following Abney, (1987); Aboh, (2004); Carstens, (1991, 1997); Cinque, (2002); Giusti, (2005); and Aboh, (2004, 2016), that the demonstrative, the possessive, and the number determiners express distinct projections, i.e., DemP, PossP, and NumP, respectively. He posits that the demonstrative, possessive, and numeral merge in the position of the specifier. Bilola posits that the Tuki NP, NumP, PossP, and DemP exhibit agreement in the sense that the lexical noun agrees with its modifiers. He asserts that constituents in the nominal domain are linearized in such a way that the head noun arises in the phrase - initial position. Following Kayne's (1994) universal hypothesis that all languages are of the type of specifier - head - complement, Bilola

(2013) proposes that for the head noun in Tuki to be initial it is required to raise into that position by movement. Hence, Biloa argues that the Tuki nominal expressions are derived by cyclic and snowballing movement in the same way that Aboh (2004) postulates. In Tuki, Biloa (2013) posits that some adjectives occur in the pre-nominal position while others occur post-nominally. A DP in Tuki language can contain up to six adjectives, three on each side of the lexical head noun. Regarding the position of adjectives in the DP, literature shows that adjectives substitute for the specifier positions of the projection.

Regarding focus, Biloa (2013) demonstrates that almost any element, including subject NP, verb, and PP in the clause can be brought into prominence (focus) through a syntactic operation. He demonstrates that topicalized elements in the Tuki clause occur in the left periphery of the IP, and they occupy the specifier position in the structure. With regard to the clausal functional heads, Biloa (2013) asserts that Tuki has twelve clausal functional heads which express notions that would be expressed by adverbs. Functional heads examined in this study are those which are related to tense, aspect, and modality. In accordance with Cartography, Biloa (2013) argues that the left periphery is occupied by phrases that are headed by functional categories such as force, focus, and topic. He posits that the head of the ForceP hosts the complementizer *ee* ‘that’. Biloa asserts that the highest projection ForceP encodes a null operator and an agreeing word in Tuki relatives to what he calls ‘a Relative Phrase (RelP)’.

Torrence (2013) examines the clause structure of Wolof, a Sene-Gambian language. In this study, Torrence (2013) describes the types of clauses in Wolof, and then he focuses on the left periphery of the clause structure by considering the position of focus, topic, and question particles (e.g. interrogative). With reference to the view of Rizzi (1999), and Rizzi (2001) that the left periphery of a clause is occupied by various phrases headed by functional elements such as focus (FOC), topic (TOP), and force, and that force (an element that determines the sentence type, e.g., declarative, affirmative) is the highest of all phrases in the Italian clause’s left periphery, followed by other elements, Torrence (2013) proposes that Rizzi’s structure needs to be expanded. He invokes the fact that the Wolof data demonstrate that there are agreement elements that can precede the Force phrase and hence, appear as the highest elements in the left periphery in clefted clauses. Thus, Torrence (2013) proposes the following left periphery structure for Wolof.

(14) agree Force agree (TOP*) INTy/n (TOP*) INTwh DetP FocP (cleft)

In regard to null nominals and overt WH-elements in Wolof, Torrence (2013) argues, among other things, that Wolof null WH's can move successively cyclically. Finally, regarding the complementizer agreement in Wolof, Torrence (2013) concludes that Bantu languages and Atlantic language families may display complementizer agreement.

Allen (2014) investigates the Runyankore-Rukiga DP including reference to (in)definiteness and (non)specificity. She employs Lyons' (1999) views on definiteness in featuring the latest version of the minimalism program and cartographic syntax. Runyankore-Rukiga is a language that lacks overt articles such as those found in English. Stating that articles are viewed to denote (in)definiteness and (non)specificity in languages with overt articles, Allen (2014) argues that Runyankore-Rukiga has several morpho-syntactic and pragmatic reflexes through which (in)definiteness and (non)specificity can be encoded.

Allen (2014) addresses the question of whether the pre-prefix (initial vowel, as she refers to it) is associated with semantic features of (in)definiteness and (non)specificity in the Runyankore-Rukiga DP. She examines the categorial status of the pre-prefix within the minimalist program framework. She argues that the pre-prefix denotes the feature specificity and contrastive focus. In this regard, she contends that the pre-prefix occurs as head of the DP in Runyankore-Rukiga. This is motivated by certain discourse-pragmatic contexts that define the semantic features. In examining the (non-)occurrence of the pre-prefix in the inflection of the nominal modifiers with inherent semantic features of (in)definiteness and (non)specificity, she argues that the pre-prefix occurring in the inflection of the adjective, the numeral, and the possessive modifiers is like the demonstrative root **a-**. This argument is supported by Wald (1973) and Visser (2008) who argue that the pre-prefix syncretically emerged from original anaphoric demonstratives. Allen argues that the property that the pre-prefix is realized either optionally or compulsorily in the morphology of the adjective, the genitive, and the numeral can reveal features similar to the anaphoric demonstrative. Consider the example from Allen (2014:263) in construction with a *pro* head, as demonstrated below:

(15) Ndeetera *(e)kihango
 n - reet - er- a (e)-ki-hango
 1SG-bring-APPL-FV IV-7-big
 'Bring me the big one'

In the example above, Allen claims that the adjective occurring with a phonologically empty lexical head often corresponds to the construction with an overt lexical head noun. The *pro* head construction may be in the environment where the interlocutors are familiar with the referent, hence revealing a definite specific interpretation.

Allen (2014) postulates that the pre-prefix occurring with a *pro* head in Runyankore-Rukiga realizes an entity with a contrastive focus reading whereby, the pre-prefix encodes the anaphoric features of the demonstrative in the given discourse. Similarly to other nominal modifiers like the possessive and relative, it is argued by Allen (2014) to exhibit a similar interpretation when the pre-prefix occurs obligatorily in a phrase with a *pro* head. She asserts that the pre-prefix in this context renders definite interpretation, hence it projects a functional category Determiner.

Allen postulates with regard to bare nouns, that there must be appropriate discourse-pragmatic considerations for them to encode features of (in)definiteness and (non)specificity. She maintains that common knowledge between interlocutors, previously mentioned entities, socio-cultural and situational deliberations inform the interpretation of the features of (in)definiteness and (non)specificity of DPs with bare nouns. She states that the inherent features of certain nouns may supplement the reading of nouns concerning (in)definiteness and (non-) specificity. For example, she argues, in line with Lyons (1999) that unique nouns such as **eizooba** 'sun', **okwezi** 'moon', and **ensi** 'earth' are definites in terms of the uniqueness notion. Proper nouns are unique by default, hence interpreted as [+definite, +specific].

Allen (2014) explores the function of the Runyankore-Rukiga pre-prefix in DPs containing modifiers that are inherently definite, including demonstratives, functional elements **-a** and **nya-**, quantifiers, and the absolute pronouns. According to Allen, the semantic criterion of identifiability, as postulated by Lyons (1999) can account for the definite interpretation of such DPs. She maintains that DPs containing these modifiers further obtain a feature of specificity from the occurrence of the demonstrative, while the pre-prefix in the inflection of a modified noun with a pre-nominal demonstrative encodes additional emphasis.

Allen (2014) postulates that Runyankore-Rukiga nominals are structurally represented in a DP analysis in the sense that all NPs are headed by determiners. She also posits that the functional morphs **-a** and **nya-** are considered as determiners that head the DP with [+definite +specific] readings. Allen argues that the pre-prefix occurring with bare nouns, and the pre-prefix occurring

optionally with nominal modifiers like some quantifiers, the adjective, the possessive, and the relative occur as head of the DP in Runyankore-Rukiga.

Invoking the DP Hypothesis by Abney (1987) who posited that NP is best reanalyzed as a DP, Basweti, Achola, Barasa, Michira (2014) examine the Ekegusii DP by focusing on the relationship between the sentential agreement and the NP concord. They provide evidence for the view that Ekegusii nominal expressions have a DP analysis, employing the framework of the Minimalist Program, for determiners occurring in the same DP between the D-head and the NP complement.

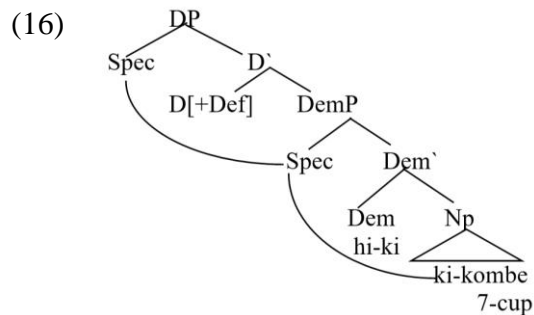
According to Basweti et al. (2014), the Ekegusii nominal domain has a noun-initial order and some determiners such as the demonstrative and the possessive can co-occur in the order where the demonstratives strictly precede the possessives. They also posit that the elements of the DP are ordered in such a way that the determiner occurs in the post-nominal position. They maintain that, unlike other determiners, the demonstrative is marked since there is a possibility of three demonstratives appearing in the same DP with a specificity reading. They propose that such a DP informs a derivation with three intermediate agreement phrases whose Specifier (SPEC) positions are targeted by the movement of the demonstratives from the noun.

Basweti et al further demonstrate that internal DP concord and sentential agreement are in a symmetrical relationship in Ekegusii which include the Determiner and its NP complement. They suggest that determiners are generated at the N-head before any movement occurs in the Ekegusii DP. In addition, they postulate that elements such as adjectives, possessives, demonstratives, and genitives must agree with the lexical head noun in number and class. Basweti et al. posit that since these elements must agree in feature with the lexical head noun, DP elements like demonstratives, numerals, and possessives need to move upwards to occupy different positions in the structure to check their features. In other words, such elements are subject to movement in the Ekegusii DP structure. They move to the Agreement Phrase (AGRP) and occupy the Specifier position of that phrase (the Agreement Phrase). They propose that the noun itself moves upwards to the area of the empty D to check its features. Thus, they argue that, similar to clausal structures, where elements are merged in the VP before any movement for feature checking, elements of the nominal domains are merged in the NP before they move for feature checking.

Concerning the semantic interpretation of the Ekegusii DP, the study of Basweti et al. (2014) was not concerned with this aspect, apart from stating that the Ekegusii demonstrative can be interpreted as a definite if the view for the indefinite reading of a noun is adopted. Basweti et al. (2014) draw the conclusion that the principles of feature checking and complete interpretation are important in ensuring Ekegusii constructions are grammatical. They state that the agreement system in Ekegusii is best accounted for by feature checking. They posit that the NP in Ekegusii is headed by a functional category D. They argue that movement of elements across Specifier of Agreement Phrases (SPEC-AGRPs) and the other functional categories checks agreement features between determiners and the noun. They posit that the Ekegusii DP contains a functional Agreement Phrase category (AGRPs).

Ndomba (2017) presents an analysis for Kiswahili on nominal and its structural modifiers—demonstratives, adjectives, possessives, and numerals. According to Ndomba (2017, 2018), the Kiswahili nominal structure provides evidence for a DP analysis. It may either be occupied by a null determiner or the demonstrative. He concurs with Van de Velde (2005) that demonstratives in Bantu languages may occur either before or after a lexical noun. Ndomba (2017) argues that pre-nominal demonstratives function as the definite article in Kiswahili and occur in the D position in the DP internal structure. Thus, Ndomba (2017:128) states that the pre-nominal demonstrative appears in D following its raising, invoking views from Shlonsky (2010). In this regard, Ndomba argues that the raising of the Dem to the D position is motivated by the presence of the definiteness feature of the pre-nominal demonstrative **hiki** 'this'. Ndomba maintains that the raising of nP to Spec is blocked with the demonstrative, and hence the nP lands in Spec DemP. He proposes that for Swahili nouns, the D position is considered to have an abstract feature [+Definite] beside other relevant characteristics of nP in D, irrespective of whether the language is determiner-less or not.

Ndomba (2017, 2018) argues that post-nominal demonstratives serve a deictic function by denoting the relative distance or location of the referent to the setting in which the interlocutors are found. Thus, Ndomba (2017:127) derives the DP structure (19) in the sense that the post-nominal demonstrative occupies the position below D. This assumption is similar to Van de Velde's (2005) argument that the post-position demonstrative is a proper deictic element.



Ndomba (2017) proposes that the internal structure for Kiswahili DP **kikombe hiki** is like its English equivalent of ‘this cup’. The only difference is that the Kiswahili nP raises to Spec DP via Spec DemP. He maintains that in the Spec DP, nP can check its relevant features in D via the Spec-head relation.

Concerning the order of DP elements in Kiswahili DPs, Ndomba (2017, 2018) demonstrates that the underlying order of the elements is similar to the English demonstrative-numeral-adjective-noun order i.e., those three beautiful children. However, he points that the head noun-initial surface structure of Kiswahili elements stems from nP movement to the initial position, Spec DP, which results in the opposite order **Watoto hawa watatu wazuri** ‘children those three beautiful’.

Gambarage (2019) argues that the Nata pre-prefix is syntactically realized as a functional category determiner. With reference to Longobardi’s (1994) view that DPs are associated with argument expressions, Gambarage (2019) argues that the Nata pre-prefix is associated with argumenthood.

Gambarage (2019) challenges the generally assumed view that the determiner is associated with the notion of definiteness and specificity. He posits that the occurrence of the Nata and other Bantu languages pre-prefixes are essentially concerned with the speaker’s knowledge. He argues that definiteness, specificity, mass-count distinction, Case, domain restriction, or deixis do not condition the occurrence of the pre-prefix in Nata. Gambarage (2019) maintains that the Nata pre-prefixes neither encode definiteness nor specificity. Referring to the view that definiteness is associated with the novelty-familiarity distinction, Gambarage (2019:57) asserts that the overt pre-prefix in Nata occurs both in novel and old contexts. Thus, he posits that the pre-prefix is not associated with the familiarity interpretation. He states there is no difference between a novel and familiar interpretation encoded by the pre-prefix, as the same pre-prefix is realized in the novel and familiar settings. Gambarage (2019) gives evidence for his claims, considering

narrative and non-narrative data. He maintains that the Nata pre-prefix does not presuppose existence, uniqueness, maximality, or does not discriminate weak from strong definites, like the Germanic definite determiners. In regard to specificity, he states that the Nata pre-prefix does not discriminate specific from non-specific referents and that Nata pre-prefixes appear in both specific non-specific contexts. He states that the Nata pre-prefix properties do not support the hypothesis that definiteness and specificity may condition the (non-)occurrence of the pre-prefix and the determiner in that it is neither associated with Case, deixis, nor a domain restriction element. He proposes that the selection of the determiners in Nata is essentially associated with the concept of 'belief-of-existence'. Gambarage's claim that the occurrence of the determiner pre-prefix in Nata and other Bantu languages is based on the concept of 'belief-of-existence', and that other factors like (in)definiteness, (non-)specificity, (non-)referentiality, and (non-)focus do not interact with the occurrence of the determiner pre-prefix is not supported in the current study. This study views the pre-prefix in igiHa as interacting with the information structure (IS) feature of contrastive focus. It also advances the view that the pre-prefix in igiHa encodes the semantic readings of (in)definiteness and (non-)specificity.

Hang'ombe, Mwiinde, and Mweembe (2019) provide an account of the pre-prefix in Tonga (M64), examining specifically its distribution synchronically. They discuss a number of categories to identify in which context such category exhibits a pre-prefix. The findings in this study demonstrate that the pre-prefix can occur with a lexical head noun and other nominal modifiers such as possessives, pronouns, numerals, adjectives, and demonstratives. They argue that the (non-)occurrence of the pre-prefix in the inflection of the lexical noun and the pronoun is associated with the feature of (in)definiteness. According to them, the occurrence of the determiner pre-prefix in the inflection of the lexical head noun and the pronoun is associated with the feature of definiteness while its absence encodes the indefinite interpretation. Hang'ombe et al. (2019) argue that the occurrence of the pre-prefix in the inflection of the adjectives and the possessive modifiers in Tonga encodes both features of definiteness and focus. In regard to the numeral nominal modifier, Hang'ombe et al. (2019) postulate that both cardinal and ordinal modifiers in Tonga can exhibit the pre-prefix. They postulate that cardinals are inherently interpreted with a feature of emphasis (specificity or focus) and that the occurrence of the pre-prefix in the inflection of cardinal modifiers encodes additional emphasis, i.e. additional specificity/or focus. Regarding the ordinal numerals, Hang'ombe et al. (2019) argue that they are

inherently neutral with reference to the feature of specificity. Thus, the occurrence of the pre-prefix in the inflection of ordinals is simply for encoding primary emphasis and specificity. Hang'ombe et al. (2019) conclude that given the fact that the Tonga pre-prefix is associated with additional emphasis and focus, it is possible that it is realized on the categories on which the speaker wants to express definiteness.

The current study, however, postulates that the occurrence of the determiner pre-prefix on the inflection of nominal modifiers in igiHa does not only encode the feature of definiteness and specificity and the information structural feature of contrastive focus, but it is also syntactically associated with the Determiner predication analysis, following proposals by Panagiotidis and Marinis (2011). This proposal will be discussed in Chapters Five and Six of this study.

In a recent study, Abass (2021) investigated the syntax-semantics features of the DP clausal relative in Shupamem. He assumes the Minimalist Program and Rizzi's (1997) Cartography framework, which is also assumed in the current study. However, for investigating the semantics of relative clauses, Abass (2021) employs some older semantic theories, which will not be employed in this study. Rather, this study invokes the theory of definiteness and specificity postulated by Lyons (1999) in which he posits the notions of identifiability, uniqueness, familiarity, and inclusiveness to examine the interpretation of (in)definiteness. Issues on definiteness and specificity are currently prominent in studies on the syntax-semantic interface. Some of these will be addressed in examining and analyzing the interpretation of (in)definiteness and (non-)specificity in igiHa DPs.

This study will employ the views on the information structure of mainly Repp (2010, 2016), concerned with contrastive focus. Furthermore the current study assumes the Cartographic studies framework which posits the Topic Phrase and Focus Phrase in the left periphery of clauses and, as argued by Aboh (2004), for DP. In this dissertation, information structure theory is essential in examining the interpretations of the igiHa DPs with various nominal modifiers with(out) a lexical head noun and the nominal modifiers in the post-nominal and pre-nominal positions. As will be demonstrated in Chapters Four, Five, and Six of this study, the occurrence of the pre-prefix in the inflection of the nominal modifier represents the structural occurrence of the functional category determiner. I will argue that this functional category encodes

definiteness, specificity, and contrastive focus, invoking views from Repp (2016) regarding explicit alternative, explicit alternative set, and implicit alternative set.

3.4 Perspectives on the syntax-semantic interface

As was discussed in Chapter Two of the current study, scholars widely argue that DPs are headed by an element that bears characteristics of the functional category D. Some researchers have argued that an article is not the exclusive entity representing the functional category D. A discussion was given, with reference to Ghomeshi, Paul, and Wiltschko (2009) that, apart from the function performed by a determiner in generating argumenthood, the determiner is also associated with semantic features of (in)definiteness and/or (non-)specificity in some languages. Syntax interrelates with semantics through reference interpretation, as argued by Gundel and Abbott (2019). Thus, this section is devoted to discussing perspectives on the interpretation of the nominal expression regarding semantic features of definiteness, specificity, and reference.

3.4.1 Definiteness

Two features have been distinguished by Lyons (1999) that he associates with definiteness, namely ‘familiarity’ and ‘uniqueness’. In this regard, Gillon (2009) decomposes definiteness into domain restriction and uniqueness presupposition, which yielded her conclusion that definiteness that is defined by the domain restriction is associated with the syntactic position occupied by the functional category determiner.

Aguilar-Guevara, Loyo, and Maldonado (2019) posit that a cross-linguistic view of definiteness has been an important theme in Generative syntax research. In this regard, they postulate that definiteness is generally viewed to agree with the heads of Determiner Projections for languages with overt articles. In contrast, the view about definiteness represented in DP for languages with no overt article is still in debate. Some researchers, following the Universal DP approach, assume that definiteness associated with DP projection is realized cross-linguistically, irrespective of whether the particular language has an explicit or implicit definite determiner (Carstens 1993, 2008; Cinque, 2002; Longobardi, 1994; Stanković, 2014; Veselovská, 2014, among others). In this regard, it is assumed that nominal expressions in languages with covert determiners have a phonologically empty Determiner-head. Other researchers suggest that not all nominal arguments support a DP analysis and that some languages might lack the category D

altogether. On this view, the absence of an explicit determiner denotes a lack of a definiteness reading (Baker, 2003; Bošković 2008, 2013). From this study, the view emerges that the debate on definiteness marking in languages without overt determiners has not yet been resolved. For example, Chen (2004) asserts that the classifier head encodes a definite meaning – when no numeral is present in languages such as Cantonese and Mandarin Chinese. On the other hand, Simpson et al. (2011) maintain that specifier definites encode definiteness in Vietnamese, Hmong, and Bangla languages. Some studies have addressed the notion of definiteness cross-linguistically, including Dryer (2014, 2019) who examined the different structures that different languages employ regarding the occurrence of definiteness.

Research studies demonstrate that languages vary greatly in respect to how they express the semantic feature of definiteness. Regarding semantically motivated (in)definiteness marking, some languages, particularly article-less languages, denote a definiteness feature through morphological realizations. Considering the feature of definiteness in relation to the syntax of NP, Winter (2000) argues that the relationship between the semantic feature of definiteness and syntax of the Hebrew NP is based on the view that the definite article **ha-** is an affix that is contained in the lexicon, rather than an independent word. Winter (*ibid.*) maintains that the agreement of the definiteness feature in the Hebrew NP provides evidence for the interface between syntax and semantics.

In a related study, Danon (2010) posits that grammatical definiteness may give rise to the occurrence of morphological manifestations of definiteness in Hebrew, specifically where attributive adjectives obligatorily agree in definiteness with the lexical noun modified. The manifestation of morphological definiteness is represented syntactically through agreement. Danon (2010) argues that definiteness in the Hebrew DP is accounted for by a syntactic mechanism that involves sharing of a morpho-syntactic definiteness feature.

Another study that contributes to a better understanding of how natural languages express definiteness is that of Schwarz (2013). In this study, Schwarz presents an overview of one class of cross-linguistic phenomena, focusing on languages that differentiate between two kinds of definites, namely German, Fering, Akan, Mauritian Creole, Lakhota, Hausa, and Haitian Creole. He identifies two types of definites: one that relates to weak articles and is grounded on uniqueness, and another that relates to strong articles, which encodes an anaphoric reading.

In his subsequent study, Schwarz (2019) examines the contrast between the two types of definite descriptions in respect of new data drawn from different languages including Hausa, Lakota, Mauritian Creole, Haitian Creole, among others. He concludes that some languages express definite referents through referents that are uniquely identified in the context, hence exhibit the uniqueness factor, whereas others express definiteness on referents that have been established in the preceding discourse context. He refers to unique definites as ‘weak’ definites and familiar (anaphoric) definites as ‘strong’ definites.

With regard to the distinction between strong and weak definites, Cisneros (2019) posits that definiteness in the Cuevas Mixtec language is marked either by bare nouns that denote uniquely identified referents or by a definite article used anaphorically. Cisneros argues that lexical nouns exhibit three types, namely nominals that encode uniqueness, nominals whose definiteness is explicitly manifested through both uniqueness and an anaphoric definite article, and nominals that are incompatible with the definite article. He asserts that most of the nouns in Cuevas Mixtec fall into the second group. He assumes that the anaphoric feature is dominant in encoding the semantic feature of definiteness in Cuevas Mixtec. His article demonstrates how definiteness encoding is associated with specific language features, such as the lexical classes of the nouns they are marking.

3.4.1.1 The phenomenon of poly-definiteness

Polydefinite noun phrases involve the occurrence of more than one definite determiner in a nominal phrase. Lekakou and Szendroi (2007) argue that polydefinites in Greek exhibit the co-occurrence of the lexical head noun and the adjective modifier where each exhibits a determiner. They argue that polydefinites contain an ellipsed lexical noun in one of their DP-subparts. They posit the structure in which the two DPs are dominated by a higher DP. This DP can occur as a predicate where it serves as the argument of a predicate.

Another study on this issue is that of Karatsareas and Lekakou (2018), who examine the multiple occurrences of definite determiners in Standard Modern Greek (henceforth, SMG) and Cappadocian Greek (henceforth, CG). They postulate that two varieties exhibit determiner spreading whereby both the head noun and adjective modifier occur with their determiners. Consider the following examples from Karatsareas and Lekakou (2018:189):

- (17) a. **to** omorfo **to** koritsi [SMG]
 the pretty the girl
- b. **du** omurfu **du** kuritj [CG]
 the pretty the girl
 ‘the pretty girl’

In the examples above, the definite determiners **to** in SMG and **du** in CG occur with both the lexical head noun and its modifying adjective. Karatsareas and Lekakou (2018) argue that the nominal expression in SMG remains with a ‘monodefinitive’ semantic interpretation, although it contains more than one definite determiner. They maintain that for the case of SMG, polydefinitive expressions vary from mono-definitive expressions, in the sense that polydefinitives exhibit freedom in respect to the order between adjective and noun, while mono-definitives do not. They posit that in mono-definitive expressions, the adjective appears strictly in the pre-nominal position. In circumstances where more than one adjective is present in polydefinitive constructions, they all exhibit the determiner, and all possible word orders are available.

Karatsareas and Lekakou (2018) assert that there are proven circumstances in CG where the DP containing the attributive adjective and the lexical head noun includes one definite determiner, as in **to meya ađelfos** ‘the older brother’. They further state that in this circumstance the second definite determiner is covertly marked, hence a phonologically empty determiner. They point out that a phonologically empty determiner occurs in some specific morphological contexts to which they refer as ‘the nominative of historically masculine and feminine nouns’. Since definiteness is commonly interpreted in terms of familiarity and/or uniqueness Karatsareas and Lekakou (2018) argue that the definite determiner in determiner spreading cannot be associated with semantic definiteness. They assert that reference is made to a single referent even in the case of the occurrence of multiple determiners in the same nominal expression. They maintain that explicit articles possibly do not encode semantic definiteness.

The question of whether definiteness involves a semantic property that is relevant in syntax, or an independent syntactic representation has been a prominent question among scholars. In this regard, Danon (2001) examines the grammar of Hebrew. She argues that definiteness is a syntactic property that exists in the grammar of Hebrew that demonstrates the interaction between syntax and semantics. She maintains that definiteness serves syntactic functions that can be analyzed without semantic reference. She asserts that syntactic and semantic definiteness

cannot always overlap and that the former cannot be seen as the unique source of the latter. In regard to the interface between syntactic and semantic definiteness, Danon (2008) asserts that the presence of syntactic definiteness in Hebrew does not warrant the existence of semantic definiteness. However, she states that this assertion does not disregard the possibility that syntactic definiteness can be involved in identifying semantic definiteness in a more complicated way. Danon argues against the idea that the definiteness of the DP entails a one-to-one correspondence between syntactic and semantic definiteness. She, therefore, argues that semantic definiteness in Hebrew is distinct from syntactic definiteness, although syntactic definiteness may be employed in the interpretation of the noun phrase.

With regard to languages with no syntactic feature of definiteness such as Turkish and Finish, Danon (2008) proposes that the DP can be interpreted with a feature of definiteness through the syntax-semantic interface. She demonstrates that definiteness is an important issue for explaining the syntax-semantic interface in Hebrew. She posits that one of the most salient features of the Semitic genitive construction labeled ‘Construct State’ (henceforth CS) is the spreading of the definiteness value of the embedded genitive DP to the entire CS. Danon (2008:873) illustrates this phenomenon in the following example, where a definite embedded DP (**ha- studentim**) realizes the entire CS in the object position definite:

- (18) ha-mištara ivtexa et hafganat ha-studentim ha-gdola.
 the-police secured OM demonstration the-students the-big
 ‘The police secured the big student demonstration.’

In respect to the above example, Danon states that the object marker **et**, which occurs only with definite objects, occurs obligatorily. Considering that attributive adjectives must agree with the noun that they modify in gender, number, and definiteness in Hebrew; Danon argues that the adjective **ha-gdola** in the example above, which modifies the entire CS headed by **hafganat**, is obligatorily realized as definite, and exemplifies properties of the syntax-semantic interface. Danon states that properties of semantic definiteness cannot provide an account for syntactic aspects of determiner spreading (DS). She attempts to determine the extent to which the main insights of these analyses can be incorporated within the framework of recent versions of the Minimalist framework, discussing the question whether employing this framework would give rise to any new insights into the mechanisms involved. The DS account she proposes contributes to Minimalist research due to the view of combining morphology, syntax, and semantics.

Danon (2010) examines the definiteness feature at the syntax-semantics interface, arguing that definiteness in the Hebrew CS is expressed by assuming a monovalent morpho-syntactic definiteness feature. She maintains that definiteness in Hebrew is analyzed through a feature-sharing mechanism. This mechanism involves that a single feature is associated with two or more nodes in the syntactic representation. Consider the following example from Danon (2010:12) that illustrates that the definite feature generated by the definite element **ha-** embedded in the nominal is linked to the adjective as an agreement marker:

- (19) dan maker et ha-yalda **arakut** ***(ha-)raglayim**
 Dan knows OM the-girl long the-legs
 ‘Dan knows the girl with long legs’

According to Danon, the construction does not only require the syntax to define the particular position of interpretation of a certain feature. The interpretability can be determined at the syntax-semantics interface, where non-syntactic information can also be taken into consideration provided that syntax represents the definite feature at a minimum on one head that corresponds to its meaning. Danon asserts that definiteness as a mechanism for exploring the syntax-semantics interface discussed for Hebrew is not universal. Different languages may display different inventories of morpho-syntactic features, and the availability of a given feature could have implications for the kinds of syntactic constructions that are appropriate for a particular language.

3.4.2 Specificity

Several studies demonstrate that (non)specificity is closely related to the notion of (in)definiteness. Von Stechow (2002) argues that the relationship between (non)specificity and (in)definiteness is in essence that they both refer to the ways of marking a nominal expression with reference. The function of specificity, in particular, is assumed to point out the semantic uniqueness of a referent in the mind of the speaker. Lyons (1999) posits that the central features of specificity can be considered among the notions of referentiality and identifiability. This section discusses views from selected studies on how the so-called article-less languages express specificity. To my knowledge, fewer studies have focused on specificity marking in article-less languages than on definiteness.

Katunar, Gold, and Gnjatović (2013) present a wide-ranging account of the linguistic structures that express specificity in Croatian, an article-less language. In this account, Katunar et al. (2013) argue that the nominal expressions that are commonly used for articulating specificity in Croatian are (a) the expressions with the numeral **jedan** 'one' which they argue to be functionally an indefinite article, and (b) the definite and indefinite pronoun constructions, such as **taj neki** 'that some'. Katunar et al. (2013) maintain that specificity is relatively a matter of discourse interpretation, and as such conveys contextual information about an utterance. Due to their discourse nature, Katunar et al. (2013) postulate that there is a narrow line that separates specific from non-specific markers in Croatian as they show with the example of **jedan** 'a; one'. However, Katunar et al. (2013) assert that the specificity phenomenon, as a matter of linguistic category is gradable. For this reason, they suggest three categories of specificity in Croatian, to which they refer as contextual specificity, semi-lexicalized specificity, and constructional specificity. In this classification, they focus on single lexical units or structures, which trigger specificity markers. They demonstrate that the structure **taj neki** 'that some' is an exclusive category with a specificity interpretation constantly.

3.4.3 Reference

Another way through which the interface between syntax and semantics can be explored is through referential forms. Gundel and Abbott (2019) state that linguists consider the term reference in relation to semantics and pragmatics. Semantic reference is concerned with something expressions do, while pragmatic reference is concerned with something linguistic expressions do. In the conception of semantic reference, the linguistic expression must have a reference reading from individual words to sentences, in contrast to pragmatic references that require only NP/DP to have a reference reading.

O'Rourke (2019) postulates that reference relates to intentions if they are formed to explain context-sensitive lexical items such as indexicals and demonstratives. O'Rourke states that if one reaches a place where there is one bottle of beer and another person says, "That is my beer", it is sensible to interpret the use of the demonstrative 'that' as reflecting the speaker's intention to refer to the bottle of beer the addressee is about to take. O'Rourke states that positing referential intention indicates that the speaker knows what s/he is talking about. He further argues that referential intentions are not limited to indexicals and demonstratives. He states that the major

motivation for including referential intentions into semantic and pragmatic theory is explained as speaker control over one's meaning, and it supplies two catalogues of referential intentions. These catalogues are levels of intentions in discourse and intentions that attach to specific lexical entities.

Gundel, Hedberg, and Borthen (2019) address the question of what makes it possible to understand referential expressions. They posit that human languages can use different forms to refer to the same thing, and the same form can be used to refer to many different things. Yet speakers continue to understand one another. They posit that there are referential expressions that help the hearer to understand what is being expressed and that there are additional referential elements that the speaker may employ in addition to conceptual descriptions. Such referential elements encode information about how and where the referent can be retrieved by the hearer. They posit that these forms encode what they call the 'Givenness Hierarchy'. With respect to this hierarchy, Gundel et al. (2019) argue that each cognitive status entails all lower statuses but not the opposite. Their assumption is supported by several corpus studies on the relationship between referring forms and cognitive statuses. Gundel et al. posit that the object of an NP introduced by a demonstrative determiner in English must be at least familiar. They assert that the demonstrative determiner will be incorrect when the entity is uniquely identifiable but not familiar to the hearer. They state that the same finding is attested in Japanese, Spanish and Russian. Hedberg, Gundel, and Borthen (2019) examine how the term referential is used within the Givenness Hierarchy proposed by Gundel et al. (2019). The proposed hierarchy is known as an instruction to the hearer to construct a unique representation by the time the sentence has been processed. Hedberg et al. discuss how they both differ and how they are similar to other senses of the term referential as used both in linguistics and in philosophy.

Abbott (2019a) gives a detailed account of the history and evaluation of the two notions of definiteness, i.e., uniqueness and familiarity. She discusses the problems associated with familiarity and the contexts which trigger familiarity implicatures. In exploring the notion of definiteness, Abbott (2019a) refers to the study of Christophersen (1939), which expresses the view that definiteness was historically interpreted as the shared knowledge of the referent among the participants of a certain conversation. This means that definiteness denotes referents that the speaker assumes to be known to the hearer.

Abbott (2019b) discusses the problems involved in different attempts to capture the property of definiteness and different kinds of referring expressions that can be definite. She posits that referential uniqueness appears to be the strongest notion among the contenders. She discusses the traditional proposals which comprise the notion of strength, uniqueness, and familiarity as competitors to be invoked to define definite NP/DPs. She posits that proper names, definite articles, demonstratives, and pronouns do not occur felicitously in non-contextualized existentials, hence they are classified as strong. Other elements such as possessives, indefinite, quantifiers, and genitives depend on the context, hence their strength or weakness is shifted to a whole DP.

According to Abbott (2019b), proper names, pronouns, and demonstratives all share referential uniqueness, in that it is the intention of the speaker to use these elements in a conversation to help the hearer to identify the referent. From this point, Abbott claims that this property makes referential uniqueness a strong essence of definiteness. She points out that NP/DPs with distributives such as ‘every’, ‘all’, or ‘each’ as determiners express a definite reading because of their non-generic feature which helps the addressee to be able to identify the referent.

Regarding specificity and reference, Von Heusinger (2019) discusses different ways in which specificity is modeled focusing primarily on indefinite expressions. He uses the example ‘Mary wants to marry a Swede’ in two ways. One is where Mary has a particular entity in her mind and another where she simply wants to marry any Swede. From this classical example, Von Heusinger (2019) argues that this distinction yields ambiguity even though the interpretation is truth conditionally equivalent. Among other contexts, he argues that referential anchoring is the core notion of specificity. In this terms of notion, an entity of a specific indefinite is viewed as dependent on the discourse participants. The content of the anchoring function must be unfamiliar to the hearer to distinguish specific indefinites from definites.

As far as the use of demonstratives is concerned in bringing out a referential reading, Doran and Ward (2019) provide a classification of thirteen broadly defined uses of demonstratives such as English ‘this’, ‘that’, ‘these’, and ‘those’. They also include some demonstratives which have not previously been distinguished in the literature. Their classification is grounded in the semantic value of demonstratives, specifically whether they are used to refer to a referent, a kind, a

predicate, or a kind of quantification domain. Their classification furthermore provides a basis for identifying common features of these referring expressions.

3.5 Perspectives on the syntax-pragmatic interface

The current study will invoke the syntax interface with pragmatics. As discussed in the preceding sections, the syntax is not an isolated component of grammar that functions autonomously. The interface of syntax with other components of grammar, including pragmatics, has pre-occupied scholars in syntactic studies. With reference to Kant's (1781) view, Huang (2007) points out that 'pragmatics without syntax is empty; syntax without pragmatics is blind.' Mycock (2015) refers to Levison (1983) who argues that there are certain complications in discussing the affinity between syntax and pragmatics due to the difficulties present in defining the term pragmatics itself. Mycock states that to discuss the affinity between syntax and pragmatics, one can assume that pragmatics is the study that deals with the meaning of the sentence in the context. Thus, she posits that the syntax-pragmatics interface is explored relative to the influence that context may impose on the sentence structure and its adequacy. She furthermore asserts that passivization, ellipsis, evidentiality and logophoricity, scalar implicatures, and anaphora are examples that have been studied in regard to the syntax-pragmatic interface. Mycock (2015:55) discusses examples from Ward and Birner (2006) that demonstrate how passivization may display (mis)match between syntax and pragmatics:

- (20) a. He will be succeeded by Ivan Allen Jr.
 b. The mayor will be succeeded by him.
 c. The mayor's present term of office expires on January 1. He will be succeeded by Ivan Allen Jr. ... (Brown Corpus)
 d. Ivan Allen Jr. will take office on January 1. # The mayor will be succeeded by him.

In regarding the above examples, Mycock (2015) contends that the grammatical adequacy of sentences is not merely a matter of their being structurally well-formed or interpretable, as the examples in (23) illustrate. She points out that even though the passive expressions in (23a–b) are both grammatical, (23b) is infelicitous in the context given in (23d); (23a) in contrast, can look like (23c) in a similar context.

Mycock argues that Ward and Birner (2004) discuss the infelicity of the passive expression in (23d) in terms of the relative discourse status of the syntactic subject, [**the mayor**], and the logical subject [**Ivan Allen Jr.**]. She points out that in this expression, the syntactic subject embodies information that is at least as familiar as that represented by the logical subject in the [**by**] phrase within the context of the discourse. In (23c) **the mayor**, the antecedent of the syntactic subject, is old information, having been given in the first sentence, while Ivan Allen Jr. is new information. Thus, Mycock states that the passive construction is felicitous. In (23d), by contrast, [**the mayor**] (the syntactic subject) is new information while [**Ivan Allen Jr.**] (the antecedent of the logical subject ‘him’) is old information, having been mentioned in the first sentence; as a result, the passive, though grammatical, is infelicitous. Thus, she concludes, (23d) represents an incongruity at the syntax-pragmatics interface.

Mycock states that the syntax-pragmatic interface can be evidenced through the syntax-information structure interface. She asserts that the interaction of syntax and pragmatics invoking information structure has received attention in research from a variety of different theoretical perspectives. Although the information structure is still in a debate regarding a range of different definitions, terminology, and divisions of the key notions of the information structure, the inventories provided by Krifka (2008) are generally accepted among scholars (see Féry and Ishihara 2016). Mycock states that the two notions which are frequently referred to as topic and focus often occur in accounts of the syntax-information structure interface.

Mycock postulates that some languages display a particularly insightful syntax–information structure interface. She discusses Hungarian as an example of such a discourse-structural language. With reference to examples from Lipták (2001), Mycock (2015:58) points out that a single focused element appears immediately pre-verbally and is preceded by any topic constituent in Hungarian:

- (21) [Anna]_{TOPIC} [Péter-nek]_{TOPIC} [könyv-et]_{FOCUS} adott.
 Anna.NOM Peter-DAT book-ACC give.PST.3SG
 ‘To Peter, Anna gave a BOOK.’

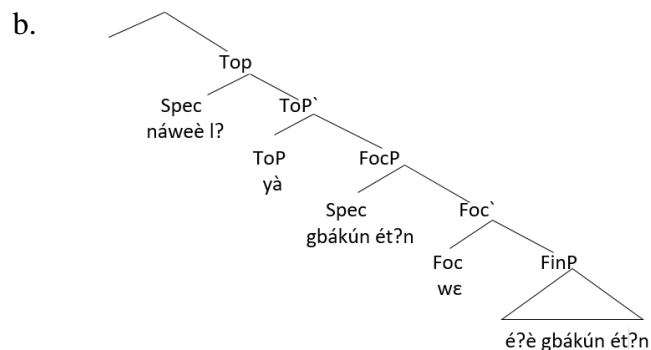
Mycock (2015) asserts that the canonical order of elements in Hungarian is consequently best articulated in terms of their information structural status instead of their grammatical function. This is also the case in other languages. This phenomenon is attested in various languages (see

Lambrecht, 1996; Progovač, 1998; Huang, 2007). Mycock maintains that even in a language in which canonical word order can be viewed as grammatical, such as English (SVO), the interface between information structure and syntax can be attested. Sje concludes that the non-canonical syntax and in relation to discourse is the key aspect for understanding the possibility of pragmatics and syntax interface.

The relationship between syntax and pragmatics is explored by Aboh (2016). He demonstrates the syntax-pragmatic interface can be represented by the Cartographic syntactic approach and Information Structure, as advanced by Rizzi (1997). Aboh (2016) claims that information structural notions such as topic-focus, and contrast are determined by means of pragmatic markers which generate various constituent movement rules. He describes how information structure directly associates with heads of the projection in the clausal left periphery, in line with views of Rizzi (1997) with a reference to a range of examples cross-linguistically

Some studies, including Szendrői (2001, 2003) and Fanselow (2006), analyze supra-segmental elements as features of the clausal left periphery. According to Aboh (2016), studies that consider information structure-related displacement rules as phonological forms (PF) do not consider the fact that a property, viewed as a mere prosodic pattern, may sometimes be related to underlying morphemic specifications. This can be supported by the fact that some languages exhibit segmental elements in the context where others make use of supra-segmental properties. Aboh (2016) discusses examples from Gbe languages that offer empirical evidence that they express the syntactic functional heads both segmentally and supra-segmentally, unlike German and Romance languages. Consider the following example for Gungbe as cited from Aboh (2016:151):

- (22) a. Návè lɔ yá gbákún étɔn wɛ é dè [Gungbe]
 woman DET TOP hat her FOC she removes
 ‘As for the woman, she took off HER HERT’



Aboh states that the fronted constituents in Gungbe (25) exemplifies a hierarchy in which topics precede focus. Given these depictions, he asserts that the only difference between them is that the Gungbe involves FocP and ToP which accommodate the focused and topicalized phrases with the focus and topic heads.

3.6 Summary

This chapter presented a review of the various aspects of theoretical perspectives regarding DP syntax. The main goal of this chapter was to discuss the rationale for the preference of DP to NP in the analysis of igiHa nominal expression in the following chapters. Since Abney's (1987) DP-Hypothesis was generally accepted for languages with overt articles in the 1980s, this chapter has discussed research on the question of whether the same DP structure could be employed to analyze in languages with no articles. A further question discussed in this chapter was whether the article is the exclusive entry representing the Determiner head. To address this question, this chapter has demonstrated that the debate continues to focus on the feature, content, and characteristics of the functional category D. The studies reviewed in this chapter arguments that article-less languages provide evidence for DP, as do languages with overt articles. In addition, some views from the literature reviewed in this chapter postulate that an article is not solitary an exclusive entry representing the functional category D (cf. Ghomeshi and Massam, 2009; Ghomeshi and Wiltschko, 2009; Gillon, 2009; Paul, 2009; Wiltschko, 2009). This chapter has identified, invoking recent formal and empirical studies, the range of variation in morphological, syntactic, semantic, and pragmatic properties of determiners across a relatively broad range of typologically and geographically unrelated languages. The current dissertation assumes the view of the necessity of separating word class determiners from the syntactic position which hosts the items so classified, namely D since recent research has demonstrated membership of the word class determiner is neither a necessary nor a sufficient condition for occupying the syntactic position D. This dissertation assumes furthermore, following Ghomeshi et al. (2009), that determiners not only have a function in the creation of arguments but they are also associated with the feature of definiteness.

The studies reviewed support the view that various languages express definiteness and specificity differently. Furthermore, the discussion has focused on a range of phenomena that manifest the interface between syntax and pragmatics, and also information structure. The studies reviewed provide evidence for the multi-perspective theoretical framework presented in Chapter Two of this dissertation posited for investigating the DP syntax of igiHa. The investigation of the (non-)occurrence of the pre-prefix morpheme in the internal structure of the igiHa DP in the following chapters will selectively invoke the views expressed from the literature reviewed in this chapter.

CHAPTER FOUR

THE DEMONSTRATIVE AND ANAPHORIC DETERMINERS

4.1 Introduction

The previous chapter presented a detailed literature review on studies devoted to the DP syntax of various languages, giving evidence for the view of the DP analysis across languages. It was pointed out that, among other elements, demonstratives in some languages can be analyzed as determiners that head DP projections. In some languages, certain affixes are viewed to have the status of determiners. Following this postulation, this chapter examines the igiHa demonstrative system, and other functional elements namely the anaphoric determiners **-áá**, **-áá-ndi**, and **-nya** as realizations of the determiner category in igiHa. This chapter advances the argument that demonstratives in igiHa are modifying determiners which have a functional category determiner root that manifests features of definiteness and specificity. In this chapter, I posit along the lines of Lyons (1999), that specificity is a discourse-semantic property denoting the related meaning the speaker conveys about a certain entity. I consider referents to be specific when all interlocutors in the discourse context are able to identify an intended referent. This view of specificity is analogous to Gundel and Abbott's (2019) notion of referentiality. For instance, Gundel and Abbott (2019) assert along the lines of Lyons (1999) that an object is viewed to be referential when the speaker and the hearer have the same mental knowledge on the referent. Thus, referential objects can be identified in terms of Lyons' (1999) 'identifiability' principle. This chapter will demonstrate that the igiHa demonstrative can occupy two syntactic positions in a DP, namely the pre-nominal and post-nominal positions. Each of these manifestations is associated with certain semantic and discourse-pragmatic inferences.

The rest of this chapter is organized into the following three main sections. Section 4.2 investigates the morpho-syntax and discourse-pragmatic features of the demonstratives in igiHa. In this section, three person-based proximity contrasts of the demonstratives are distinguished and discussed. The section also explores various forms that the demonstratives assume in respect to the nouns with which they occur. Furthermore, the word order (distribution) of the demonstratives with respect to other nominal modifiers, and the possible interpretations of the demonstrative in various contexts of its syntactic distribution are examined. Section 4.3 presents

an analysis of the morpho-syntactic properties of the determiners **-aa**, **-aa-ndi**, and **nya-**. Finally, section 4.4, gives the summary of the chapter.

4.2 Demonstratives

This section examines the morpho-syntax of the demonstrative modifier in igiHa. It furthermore examines the discourse-pragmatic interpretations evoked by the demonstrative in the nominal expression. For the purpose of achieving this objective, the chapter, in addition, examines the interaction of the demonstrative modifiers with the Determiner pre-prefix that occurs in the inflectional morphology of the lexical head noun and various nominal modifiers. Generally, the demonstrative is posited in this chapter as a deictic expression that exhibits different morphological forms and occupies different syntactic positions depending on the denotation of the relative distance of the referent from other discourse participants. In this regard, the section discusses five demonstrative contrasts in igiHa which relate to the relative distance between the interlocutors. The discussion of the interpretations of the demonstrative in this section is based on Lyons' (1999) principle of definiteness and specificity, and Repp's (2010, 2016) proposals of contrastive focus in terms of implicit and explicit alternatives. Furthermore, this section proposes the phrase structure representation of the DP containing the demonstrative in igiHa.

4.2.1 The morphological form of the demonstrative

This sub-section examines the morphological structure of the igiHa demonstrative. In this regard, five sequences of the igiHa demonstrative are distinguished, namely, **-u**, **-o**, **-no**, **-rúya**, and **-ya**. Morphologically, the igiHa demonstrative is formed by three morphemes, i.e., the morpheme that shows the relative distance between the referent and interlocutors, the agreement prefix that is analogous with the noun class prefix of the lexical modified head noun, and the demonstrative root. Depending on the relative distance between discourse participants, three levels of proximity, namely the proximal, medial, and distal are distinguished. In proximal demonstratives, the morpheme that encodes proximity is phonologically null. Similarly, the demonstrative root (DEMrt) is phonologically empty for distal demonstratives. I posit in the current study that the underlying morpheme of the igiHa DEMrt is **u-** which may occur allomorphically as **a-** or **i-** depending on the vowel of the agreement prefix. I also posit that the

initial element of the demonstrative forms the igiHa DEMrt, and the other morphemes are suffixed on the DEMrt to form a full word level demonstrative.

Table 1: The morphological structure of igiHa demonstrative

PROXIMAL DEMONSTRATIVES			MEDIAL DEMONSTRATIVES				DISTAL DEMONSTRATIVES			
CL	1DEM	Structure	2DEM	Structure	3DEM	Structure	4DEM	Structure	5DEM	Structure
1	uwu	u-u	uwo	u-u-o	wuno	u-no	wuríya	u-ríya	wuya	u-ya
2	aba	a-ba	abo	a-ba-o	bano	ba-no	baríya	ba-ríya	baya	ba-ya
3	uwu	u-u	uwo	u-u-o	wuno	u-no	wuríya	u-ríya	wuya	u-ya
4	iyi	i-i	iyo	i-i-o	yino	i-no	yiríya	yi-ríya	yiya	i-ya
5	iri	i-ri	idyo	i-ri-o	rino	ri-no	riríya	ri-ríya	riya	ri-ya
6	aya	a-a	ayo	a-i-o	yano	a-no	yaríya	a-ríya	yaya	a-ya
7	iki	i-ki	icho	i-ki-o	kino	ki-no	kiríya	ki-ríya	kiya	ki-ya
8	ibi	i-bi	ivyó	i-bi-o	bino	bi-no	biríya	bi-ríya	biya	bi-ya
9	iyi	i-i	iyo	i-i-o	yino	i-no	yiríya	yi-ríya	yiya	i-ya
10	izi	i-zi	izo	i-zi-o	zino	zi-no	ziríya	zi-ríya	ziya	zi-ya
11	uru	u-ru	ugwo	u-ru-o	runo	ru-no	ruríya	ru-ríya	ruya	ru-ya
12	aka	a-ka	ako	a-ka-o	kano	ka-no	karíya	ka-ríya	kaya	ka-ya
13	utu	u-tu	utwo	u-tu-o	tuno	tu-no	turíya	tu-ríya	tuya	tu-ya
14	ubu	u-bu	ubwo	u-bu-o	buno	bu-no	buríya	bu-ríya	buya	bu-ya
15	uku	u-ku	ukwo	u-ku-o	kuno	ku-no	kuríya	ku-ríya	kuya	ku-ya
16	aha	a-ha	aho	a-ha-o	hano	ha-no	haríya	ha-ríya	haya	ha-ya
17	uku	u-ku	ukwo	u-ku-o	kuno	ku-no	kuríya	ku-ríya	kuya	ku-ya
18	umu	u-mu	umwo	u-mu-o	muno	mu-no	muríya	mu-ríya	muya	mu-ya
23	iyi	i-i	iyo	i-i-o	ino	i-no	yiríya	yi-ríya	i-ya	i-ya

The morphological structures presented in table 1 are associated with five contrasts referred to as demonstrative one (1DEM), two (2DEM), three (3DEM), four (4DEM), and five (5DEM). The first position in the sequence named 1DEM is the most common proximal demonstrative. It is used to refer to some entity close to all interlocutors. Unlike other demonstratives in the sequence, 1DEM is formed with a DEMrt **u-**, **a-**, or **i-**, an agreement prefix of the antecedent, and of course, a proximity morpheme which is phonologically empty (\emptyset). The 1DEM is translated in English as ‘this’. In addition, 1DEM refers to referents that are in the physical context of discourse which is proximal not only to the speaker as but also to the hearer. Consider the following examples in (1):

- (1) a. Impene **izi** ziradya ubwaasi.
 i- N- pene i- zi-Ø zi- ra- ri- a u- bu-asi
 Ppfx-9/10-goat DEMrt-10-PROX AgrS- PRES- eat-FV Ppfx- 14-grass
 ‘These goats eat grasses.’
- b. Abaana **aba** barakunda imyaagi.
 a- ba-aana a - ba -Ø ba - ra- kund-a i- mi-agi
 Ppfx-2- child DEMrt-2-PROX AgrS- PRES-like-FV Ppfx-4-sugarcane
 ‘These children like sugarcanes.’
- c. Umwaana **uwu** arateeka ibirumpu.
 u- mu-aana u - u - Ø a- ra- teek- a i- bi-rumpu
 Ppfx-1- child DEMrt-1-PROX AgrS PRES-cook-FV Ppfx-8- potato
 ‘This child is cooking potatoes.’

The second position of demonstratives denotes the medial distance from the speaker, and it is referred to as 2DEM. The demonstrative of this type is associated with referents which are slightly far from the reach of the speaker in the physical discourse context, who is forced to point to them, and close to the hearer. It is formed with a DEMrt **u-**, **a-**, or **i-**, an agreement prefix of the antecedent nominal and a quantifier root **-o**³ that encodes the medial distance from the speaker. Consider the examples in (2) below:

- (2) a. Umwaana **uwo** arategeza neza.
 u- mu-aana u- u- o a- ra- tegez-a neza
 Ppfx-1-child DEMrt-1-MEDIAL AgrS- PRES-hear-FV well
 ‘That child hears well.’
- b. Igitebe **icho** kiróóvunika.
 i -ki-tebe i - ki- o ki- róó- vunika
 Ppfx-7-chair DEMrt-7-MEDIAL AgrS-FUT-break
 ‘That chair will break.’

The third type of demonstrative is referred to as 3DEM. It denotes entities that are close to the speaker and somewhat distant from the hearer. It generally encodes medial distance, specifically from the hearer. It is translated into English as ‘this’ in singular and ‘these’ in the plural. It is

³ The demonstratives in sequence two (2DEM) should not be confused with the relative pronouns used in clausal relatives. Their difference is depicted prosodically whereby the demonstrative root has a low tone **-o**, and the one of the clausal relative is marked with a high tone **-ó** as demonstrated in (i) and (ii) below:

(i) uwo mwáana
 uwo mu-áana
 1.DEM 1-child
 ‘that child (close to you but I can see)’

(ii) uwó ngóomba
 uwó n-góomb-a
 1.REL.1SG-want-FV
 ‘the one (that) I want’

formed by a phonologically empty DEMrt, which is suffixed by an agreement prefix and the medial morpheme **-no**. Demonstratives of this type are associated with referents that are in medial distance to the hearer to the extent that the hearer is in the position to see the referent. The following examples (3) illustrate the use of this demonstrative:

- (3) a. Imotoka **zino** zir'iruka chane.
 i - N- motoka Ø - zi- no zi- ra - iruk-a chane
 Ppfx-9/10- car DEMrt-10-MEDIAL AgrS-PRES-run-FV very
 'These cars run fast.'
- b. Idyiso **rino** rirabona neza.
 i- ri- iso Ø - ri- no ri- ra- bon-a neza
 Ppfx-5-eye DEMrt-5- MEDIAL AgrS-PRES-see-FV well
 'This eye sees well.'

The fourth type of demonstrative is 4DEM, which was first introduced in this study. It is formed by an agreement prefix of the antecedent noun and the distal morpheme **-rīiya** which are suffixed to the phonologically empty DEMrt. It denotes something relatively far from both the speaker and the listener, but it can be seen and located by all interlocutors. It has the meaning in English as 'that/over there'. Consider the following examples in (4):

- (4) a. Inka zirīiya zirazabuse umugezi.
 i - N - ka Ø - zi-rīiya zi- ra- zabuk-e u - mu-gezi
 Ppfx-9/10-cow DEMrt-4-DIST AgrS-PRES-cross-PERF Ppfx-3-river
 'Cows over there have crossed the river.'
- b. Igitebe kirīiya ni gisore.
 i- ki-tebe Ø - ki-rīiya ni ki-sore
 Ppfx-7- chair DEMrt-4-DIST Cop Agr-good
 'The chair over there is good.'

The fifth type (5DEM) of demonstrative in the sequence denotes some entity distal to all interlocutors in the discourse context. It renders an English translation as 'that' in the singular and "those" in the plural. It refers to a referent that is far from both the speaker and the hearer which is not present in the context where the speaker and the hearer can locate it. This study assumes this type of demonstrative to be used specifically to refer to something already mentioned in the discourse context, hence it has an anaphoric meaning. It is formed by a DEMrt that is phonologically null, an agreement prefix of the antecedent noun, and the distal morpheme **-yá** consider the following examples in (5):

- (5) a. Abaana **baya** baramenya ugukina.
 a - ba - aana Ø - ba- ya ba- ra- meni- a u- ku-kin - a
 Ppfx Agr- child DEMrt-2- DIST AgrS-PRES-know-FV Ppfx-15-play-FV
 ‘Those children know to play.’
- b. Ahantu **haya** murahoze.
 a - ha- ntu Ø - ha - ya ha- ra- hor- ye
 Ppfx-16Agr-thing DEMrt-16-DIST AgrS-PRES-cool-PERF
 ‘That place is cool.’

Demonstratives for locative classes 16, 17, and 23 occur in igiHa conversations for all spatial distances i.e., proximal, medial, and distal. They are formed with a phonologically null DEMrt which is suffixed with the agreement prefix and a morpheme that encodes a relative distance among discourse participants (proximal, medial, or distal). Consider the following examples in (6):

- (6) a. Iyi iAfirika y’Epfo yirakumize.
 i - i - Ø i-Afirika i - a epfo i- ra- ku- mir- e
 DEMrt-23-PROX 23-Africa Agr-GEN-down AgrS-PRES-OM-swallow-PERF
 Lit: This South Africa has swallowed you.
 Free trans: ‘You have stayed long in South Africa.’
- b. uku kuntebe kurakanya.
 u- ku - Ø ku-ntebe ku-ra - kanya.
 DEMrt-17- PROX 17-chair AgrS-PRES-cold
 Here on the chair, it is cold.
- c. Umwaana ari muya munzu.
 u - mu-aana a - ri Ø - mu-ya mu - n - zu
 Ppfx-1-child AgrS-Cop DEMrt-5-DIST 18 -9/10-house
 The child is in that house.

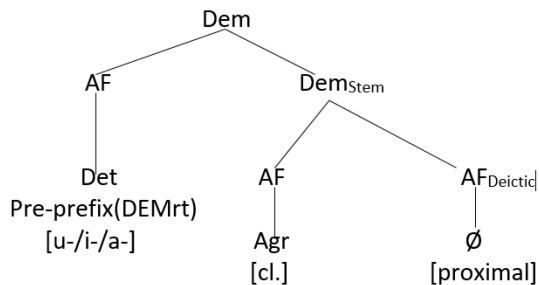
Generally, I postulate that each of the five contrasts of the igiHa demonstrative presented above is formed by several different morphemes. At least three morphemes are identified, namely a DEMrt, an agreement prefix, and a deictic morpheme, which may be either proximal, medial, or distal.

In table 1 above, for nasal noun classes, the prefix of the demonstrative is homophonous with the class prefix of the lexical head noun and separated with a glide **-w-** or **-y-**. These are noun classes 1, 3, 4, 6, 9 with the exception of class 10, which is asymmetrical. Furthermore, the table shows that the medial demonstrative displays the demonstrative root **a-**and, the noun class prefix, and the suffix **-o** or **-no**. The suffixes **-o** and **-no** are used to encode distance for referents near to the

hearer and the speaker respectively. For referents distant from the interlocutors, distance is encoded by the suffix **-rúya** for the referents visible to the two interlocutors, and **-ya** for referents out of sight. However, the igiHa distal demonstrative does not overtly display the demonstrative root morpheme in its morphology.

For the proximal demonstratives, with nasal noun classes, the vowel of the noun class prefix is reduplicated and separated by a glide **-w-**, or **-y-**, where the second syllable is the demonstrative root. For non-nasal noun classes, the proximal demonstrative is comprised of the noun class prefix preceded by a reduplicated vowel of this prefix, which is homophonous with the noun class pre-prefix. In this morphological structure, the first syllable (i.e., the morpheme homophonous with the noun class prefix) is the demonstrative root. The following diagram presents the internal structure of the igiHa demonstrative that represents proximity.

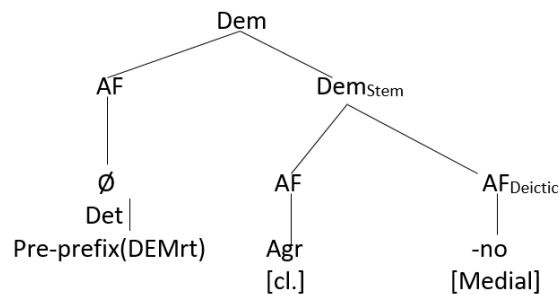
(7) The internal structure of the igiHa proximal demonstrative



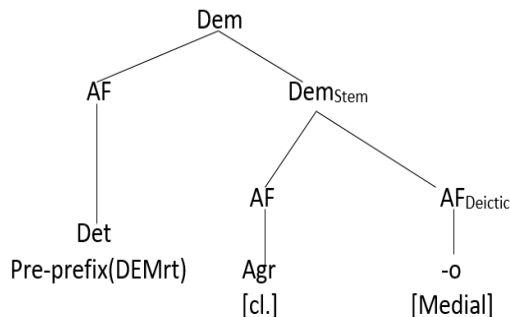
In this study the igiHa DEMrt **-u** with its variants is predominantly employed for deictic use, explicitly pointing to referents that are in extra-linguistic discourse. As Diesel (1999) suggests, there may be a referent in an extra-linguistic discourse that is either near to or far from the discourse participants. The discourse participants may wish to point to this object through a DP encompassing a demonstrative. In igiHa, I posit that a referent which the proximal demonstrative denotes is essentially nearer to all the discourse participants (i.e., the speaker and the addressee) to the extent that all interlocutors can touch it. The igiHa proximal demonstrative is comprised of a noun class morpheme (for non-nasal noun classes) and the reduplicated vowel of the noun class prefix (for nasal noun classes), the root morpheme **u-**, and a deictic proximal morpheme, which is covertly realized. The noun class morpheme realizes various forms depending on the noun class of the head noun of the DP. Therefore, it agrees with that prefix in a noun class/gender and number.

For the medial position the igiHa demonstrative exhibits two suffixes apart from the demonstrative root **u-** with its variants, and the noun class prefix that depends on the distance of the referent from either the speaker or the hearer. As a result, the medial position exhibits the suffixes **-no** for the referents close to the speaker but far from the hearer, and **-o** for referents close to the hearer but far from the speaker. The medial demonstrative with the suffix **-no** is formed by the determiner which is the demonstrative root **[u-/i-/a-]**, the noun class prefix, and the medial suffix **-no** for nasal noun classes, and non-nasal noun classes, the noun class prefix, and the demonstrative root **-no**. The latter medial demonstrative with the suffix **-o** is formed by the determiner **[u-/i-/a-]** and followed by demonstrative root **[u-/i-/a-]** for nasal classes, and the noun class prefix for non-nasal classes, then the medial suffix **-o** follows. The diagrams in (2a) and (2b) present the internal structures of the medial demonstrative with suffixes **-no** and **-o**, respectively.

(8) a. The internal structure of the medial demonstrative with the suffix **-no**

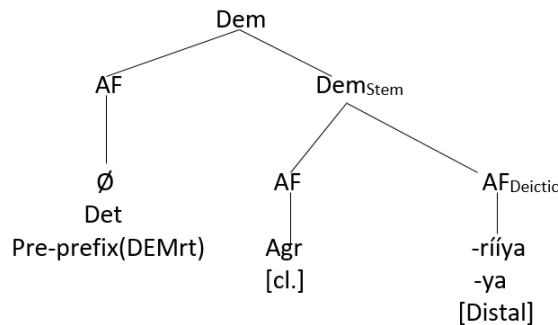


b. The internal structure of the medial demonstrative with the suffix **-o**



For the distal demonstrative, two suffixes are distinguished. There is the suffix **-rííya** for referents in the discourse context where the speaker and the hearer can locate them, and **-ya** for the referents in the context where the interlocutors are not able to locate them. The distal demonstrative suffixed with **-rííya** is formed by the demonstrative root [**u-/i-/a-**] separated by a glide **-w-**, or **-y-** for nasal classes and the noun class prefix for non-nasal classes which is followed by the suffix **-rííya**. The distal demonstrative suffixed with **-ya** is formed as well by the demonstrative root [**u-/i-/a-**] separated by a glide **-w-**, or **-y-** for nasal classes, and the noun class prefix for non-nasal classes which is suffixed by the distal stem **-ya**. Consider the following example:

(9) The internal structure of the distal demonstrative with the suffix **-rííya** and **-ya**



The above example (9) illustrates the internal structure of the igiHa distal demonstrative, where the tree diagram represents both the demonstratives root **-rííya** and **-ya**.

4.2.2 The locative demonstrative copulative **n-**

Another form of demonstrative exhibited in igiHa is the locative demonstrative copulative **n-**. The term locative demonstrative copulative (henceforth, LDCop) is adopted from Du Plessis and Visser (1992). It acts as a demonstrative used in a predicate and contained with a locative meaning. In igiHa, the LDCop **n-** can be used to refer to specified referents, which may be seen physically or referred to. In addition to that, the igiHa LDCop **n-** can be employed in conversations where the discourse participants want to point the referent to the exact location.

In igiHa, the LDCop **n-** is formed by a copular morpheme **n-**, the noun class 7 prefix **-ki-**, the agreement prefix of the antecedent modified lexical noun and the deictic morpheme that encodes

the relative distance that the referent is from the interlocutors. It is used in all three deictic positions i.e., proximal, medial, and distal positions. These forms are illustrated in table 2:

Table 2: The morphological structure of the igiHa LDCop n-

PROXIMAL DEMONSTRATIVES			MEDIAL DEMONSTRATIVES				DISTAL DEMONSTRATIVES			
CL	IDEM	Structure	2DEM	Structure	3DEM	Structure	4DEM	Structure	5DEM	Structure
1	nguwu	n-ki-u-u	nguwu	n-ki-u-u-o	ngiwuno	n-ki-u-no	ngiwuriiya	n-ki-u-riiya	ngiwuya	n-ki-u-ya
2	ngaba	n-ki-a-ba	ngabho	n-ki-a-ba-o	ngibano	n-ki-ba-no	ngibarriya	n-ki-ba-riiya	ngibaya	n-ki-ba-ya
3	nguwu	n-ki-u-u	nguwu	n-ki-u-u-o	ngiwuno	n-ki-u-no	ngiwuriiya	n-ki-u-riiya	ngiwuya	n-ki-u-ya
4	ngiyi	n-ki-i-i	ngiyo	n-ki-i-i-o	ngiyino	n-ki-i-no	ngiyirriya	n-ki-yi-riiya	ngiyiya	n-ki-i-ya
5	ngiri	n-ki-i-ri	ngidyo	n-ki-i-ri-o	ngirino	n-ki-ri-no	ngirirriya	n-ki-ri-riiya	ngiriya	n-ki-ri-ya
6	ngaya	n-ki-a-a	ngayo	n-ki-a-i-o	ngiyano	n-ki-a-no	ngiyarriya	n-ki-i-i-riiya	ngiyaya	n-ki-a-ya
7	ngiki	n-ki-i-ki	ngicho	n-ki-i-ki-o	ngikino	n-ki-ki-no	ngikirriya	n-ki-ki-riiya	ngikiya	n-ki-ki-ya
8	ngibi	n-ki-i-bi	ngivyo	n-ki-i-bi-o	ngibino	n-ki-bi-no	ngibirriya	n-ki-bi-riiya	ngibiya	n-ki-bi-ya
9	ngiyi	n-ki-i-i	ngiyo	n-ki-i-i-o	ngiyino	n-ki-i-i-no	ngiyirriya	n-ki-i-i-riiya	ngiyiya	n-ki-i-ya
10	ngizi	n-ki-i-zi	ngizo	n-ki-i-zi-o	ngizino	n-ki-zi-no	ngizirriya	n-ki-zi-riiya	ngiziya	n-ki-zi-ya
11	nguru	n-ki-u-ru	ngugwo	n-ki-u-ru-o	ngiruno	n-ki-ru-no	ngirurriya	n-ki-ru-riiya	ngiruya	n-ki-ru-ya
12	ngaka	n-ki-a-ka	ngako	n-ki-a-ka-o	ngikano	n-ki-ka-no	ngikarriya	n-ki-ka-riiya	ngikaya	n-ki-ka-ya
13	ngutu	n-ki-u-tu	ngutwo	n-ki-u-tu-o	ngituno	n-ki-tu-no	ngiturriya	n-ki-tu-riiya	ngituya	n-ki-tu-ya
14	ngubu	n-ki-u-bu	ngubwo	n-ki-u-bu-o	ngibuno	n-ki-bu-no	ngiburriya	n-ki-bu-riiya	ngibuya	n-ki-bu-ya
15	nguku	n-ki-u-ku	ngukwo	n-ki-u-ku-o	ngikuno	n-ki-ku-no	ngikurriya	n-ki-ku-riiya	ngikuya	n-k-ku-ya
16	ngaha	n-ki-a-ha	ngaho	n-ki-a-ha-o	ngihano	n-ki-ha-no	ngiharriya	n-ki-ha-riiya	ngihaya	n-ki-ha-ya
17	ngaha	n-ki-a-ha	ngaho	n-ki-a-ha-o	ngihano	n-ki-ha-no	ngiharriya	n-ki-ha-riiya	ngihaya	n-ki-ha-ya
18	ngaha	n-ki-a-ha	ngaho	n-ki-a-ha-o	ngihano	n-ki-ha-no	ngiharriya	n-ki-ha-riiya	ngihaya	n-ki-ha-ya
23	ngaha	n-ki-a-ha	ngaho	n-ki-a-ha-o	ngihano	n-ki-ha-no	ngiharriya	n-ki-ha-riiya	ngihaya	n-ki-ha-ya

As table 2 demonstrates, the igiHa LDCop **n-** is incompatible with locative classes 17, 18, and 23. Instead of the LDCop in locative class 16 extends to the other locative classes.

The major role of the igiHa LDCop is to locate referents that are visible in the physical setting. As well, the LDCop **n-** can serve an anaphoric role of tracing a referent which has already been established in the discourse. In this regard, the referent essentially occurs in the immediate adjacent discourse, as clearly indicated in (10) below:

- (10) Mur'aka akanya umugore wanje arareeba abaana ar'umwe. **Ngako** akagene niko ndamushimira.

mu-ri a - ka Ø- a -ka-nya u-mu-gore u - a - nje a - ra -reeb-a a - ba-aana
18-be DEMrt-12-PROX Ppfx-12-time Ppfx-1-wife 1-GEN-1SG AgrS-PRES-look-FV Ppfx-2-child

a - ri-u-mwe. n - ka-ki-o a - ka-gene ni-ki-o n - ra - mu-shim-ir - a
AgrS-be-1-one LDCop-12-7-MEDIAL Ppfx-12-behavior COP-7-EMPH 1SG-PRES-OM-like-APPL-FV

At the moment my wife is looking after the children alone. It is that the behavior exactly that makes me love her.’

4.2.3 The syntactic distribution of the demonstrative

This sub-section explores syntactic distributions of the igiHa demonstrative. It also addresses the question of whether multiple positions of the demonstrative with respect to the lexical head are possible. The sub-section further explores the different interpretations, if any, of the DP associated with these positions. The aim is to examine whether the igiHa demonstrative can be viewed as a Determiner category associated with certain discourse-pragmatic features.

4.2.3.1 The post-nominal demonstrative

The canonical syntactic position of the igiHa demonstrative is after the lexical head noun. This noun-modifier order reflects the generally attested basic order of the constituents of Bantu languages, in which modifiers follow the lexical head noun modified. The extract in (11) from a story collected from the natural conversation of igiHa native speakers illustrates that the demonstrative in the igiHa DP generally occurs after the lexical head noun.

- (11) Hanyuma ashira **nyama izo** mugweeso araziteeka. **Izo (i)nyama** zihiiye yachiye ashiramwo umunyu.

Haanyuma a - shir- a i - N-nyama i - zi - Ø mu - ru-eso a - ra - zi - teek- a
Later-on AgrS-put-FV Ppfx-10-meat DEMrt-Agr-PROX LOC18-11-pot AgrS-PRES-OBJ-cook-FV

Ø - zi -ya i - N-nyama zi-hii-ye a - chir -a a - ruung-a u -mu-nyu.
DEMrt-Agr-DIST Ppfx-10-meat 10-burn-PERF AgrS-next-FV AgrS-put-FV Ppfx-3-salt

‘Later on, s/he added **these meats** in the pot and cooked them. When **those meats** were cooked s/he added salt.’

The above extract shows that in the natural conversation recorded, the speaker of the first sentence uses the demonstrative after the lexical head noun, while when talking about the same referent **inyama** ‘meat’ in the subsequent sentence, the speaker uses the demonstrative after the lexical head noun. The same property is evident in another extract from the Holy Bible, in (12) where the writers use the demonstrative after the lexical head noun in the first sentence, and before the lexical head noun in the subsequent sentence.

- (12) Umwaana uwo Samweli yakorera Uwiteka imbere ya Eli. Kandi muri misi iyo ijambo dy’Imana dyari ingume, ntaa kwerekwa kwari kweruye. Icho gihe Eli yari atangiye guhuma, atakibona. Bukeye mu madyama aja kuburiri bwe,

intara y’Imana yari yitarazima kandi **uwo umwaana** Samweli yari adyaamyem mu rusengero gw’Uwiteka, aho isanduku dy’Imana. (Samweli 1:3)

The child Samuel served the Lord before Eli. And in those days when the word of God was scarce, there was no vision. At that moment, Eli was blind and could not see. The next day in his bed, the province of God was still alive, and the child Samuel was lying in the temple of the Lord, where the ark of God (Samuel 1:3)

In the first line of the Bible verses, the nominal expression **umwaana uwo** ‘that child’ exemplifies the word order of the noun **umwaana** followed by a demonstrative **uwo**. From the evidence presented by the example above, I argue that the preferred canonical position of the igiHa demonstrative is after the lexical head noun.

Regarding the interpretation of the DP containing a post-nominal demonstrative, this study posits that the post-nominal demonstrative is deictic i.e., it serves to point to a referent in the immediate situational discourse. In this regard, post-nominal demonstratives can be viewed to serve as demonstratives proper. They are associated with entities in spatial contexts which are considered to be visible to all interlocutors to the extent that the speaker can point to a particular referent by a gesture or an eye gaze. Since demonstratives are generally viewed to bear the inherent semantic features of definiteness and specificity, this study posits that the igiHa nominal phrases containing a post-nominal demonstrative is interpreted as encoding the semantic features of specificity and definiteness. The feature of definiteness relates to the factor of identifiability and the feature of specificity relates to the fact that the hearer has a particular referent in his/her mind. Consider the following examples:

(13) a. Nyoko wawe arampamagara arambaza, ‘Ni nde atooye **igitabo icho**?’

nyoko u - a - we a - ra - n-hamagar-a a - ra - n - baz-a
mother 3-GEN-2SG AgrS-PRES-1SG-call - FV AgrS-PRES-1SG-ask-FV
ni - nde a-toor - e i - ki-tabo i - ki - o
COP-who AgrS-take-PERF Ppfx-7-book DEMrt-7- MEDIAL

‘Your mother called me and asked, [While pointing to the particular chair] Who took that book?’

b. **Inyaabu yiriya** yirasahuye imbeba.

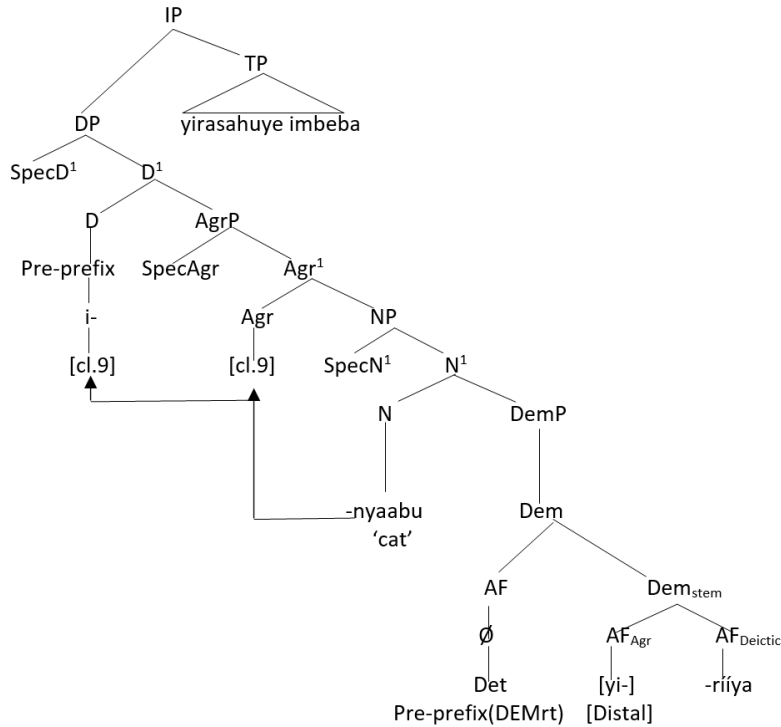
i - n - nyaabu yi-riiya yi - ra -sahur-e i - n - beba
Ppfx-9/10-cat 7-DIST AgrS-PRES-clutch-PERF Ppfx-9/10-rat
‘Hey, see that cat has clutched a rat.’

In example (13a), for instance, there may be many chairs and many cats present in the discourse context. Therefore, the use of the post-nominal demonstrative **icho** ‘that’ helps to locate the referent **igitabo** ‘book’ from any other possible books in the physical context. Similarly, the use of the demonstrative **yiriiya** ‘that’ in (13b), helps to locate the referent **inyaabu** ‘cat’. It also helps the addressee to identify the specific cat which is intended to be referred to from other possible cats in the discourse context. As argued above, post-nominal demonstratives in igiHa denote deixis. In this regard, Lyons (1999) postulates that deictic demonstratives express an identifiability reading to the lexical head noun they modify. Lyons (ibid.) excludes inclusiveness as a parameter of expressing definiteness to demonstratives for the reason that when a demonstrative is employed, it is likely to distinguish an entity from more than one object in the discourse context. In this circumstance, igiHa post-nominal demonstratives are definite by the identifiability principle as opposed to inclusiveness. Therefore, the post-nominal demonstrative makes the igiHa DP specific and definite, hence the DPs **igitebe icho** ‘that chair’ in (13a) and **inyaabu yiriiya** ‘that cat’ in (13b) possess the features [+definite] and [+specific]. The interpretative features of the DP constituent in the sentence (13b) outlined above can be represented as follows:

(14) The Phrase Structure of the DP [inyaabu yiriiya] in igiHa sentence:

Inyaabu yiriiya yirasahuye imbeba.

‘That cat has clutched a rat.’



In addition, the examples given in (15a-b) below exemplify the deictic use of demonstratives in a locative demonstrative copulative (LDCop):

- (15) a. Urupanga **ngiruno** munzu.
 u - ru-panga n - ki-ru-no mu - n - zu
 Ppfx-11-machete LDCop-7-11-MEDIAL LOC18 - 9-house
 ‘The/a machete it is here in the house.’
- b. Umuheto **nguwu** kurusenge.
 u - mu-heto n - ki-u ku - ru-senge
 Ppfx-3-bow LDCop-7-3 LOC17 -11-shelf
 ‘The bow it is here on the shelf.’

The utterances expressed in (15a-b) show that the referents **urupanga** ‘machete’ and **umuheto** ‘bow’ can be seen, hence it is near to the speaker. In addition, the speaker in the discourse context of those two utterances seems to have those particular referents in mind. Therefore, since the LDCop **ngiruno** ‘here it is’ and **nguwu** ‘here it is’ are deictic, the nominal expressions modified by the locative demonstrative copulatives in (15a-b) are [+definite, +specific].

4.2.3.2 The pre-nominal demonstrative

Since the canonical position of demonstratives is argued in this dissertation to be after the lexical head noun, it is exceptional for demonstratives to occur before the lexical head noun. When the

demonstrative appears before the lexical head noun in igiHa it refers to an entity that has already been mentioned in the preceding discourse. Thus, this study considers pre-nominal demonstratives to serve an anaphoric function in igiHa. In addition, the lexical head noun canonically occurs without its Determiner pre-prefix when it follows the pre-nominal demonstrative. However, under certain pragmatic conditions, the lexical head noun can retain its Determiner pre-prefix. The following conversation serves as an example:

(16) Speaker A: Ndageenda ku rugereero kugura amavuta.

N - ra -geend-a ku - ru-gereero ku - gur - a a - ma-vuta.
 2SG-PRES-go-FV LOC17-11-market INF-buy-FV Ppfx- 6-oil
 ‘I am going to the market to buy (some) oil.’

Speaker B: Mbeega **ayo amavuta** urooza kuyaronka?

Mbeega a - a - o (a)-ma-vuta u-roo- z - a ku - ya-ronk-a
 Q.EMPH DEMrt-6-MEDIAL Ppfx-6-oil 2SG-FUT-come-FV INF-OM-get-FV
 ‘Do you think you will get those oil?’

The utterance of speaker B has a nominal expression in which the demonstrative occurs in the position before the lexical head noun. However, in the previous utterance, the referent **amavuta** ‘oil’ was already introduced in the discourse by Speaker A. Therefore, speaker B assumes that the referent is well known among the discourse participants. The use of the pre-nominal demonstrative in this context entails an anaphoric reading in that the referent is now familiar to the discourse participants, hence encoding the semantic feature of definiteness.

Regarding the interpretation of pre-nominal demonstratives, this study assumes, along the lines of Aboh (2004) and Cinque (2013), that nominal modifiers that occur uncanonically encode definiteness and/or specificity features because they structurally occur in the left periphery where topic and focus constituents characteristically occur. I contend that pre-nominal demonstratives are essentially anaphoric in igiHa DPs. They refer to referents that are assumed to be known by all discourse participants. When the Determiner pre-prefix co-occurs with a pre-nominal demonstrative, as for Speaker B in (16) above, it adds emphasis and/or additional specificity. Scholars such as Aboh (2004), Rizzi and Cinque (2016), Giusti (2015), and Rizzi (2014) postulate that nominal modifiers occurring in non-basic (or uncanonical) positions prompt the definiteness and/or specificity reading of DPs in which they occur since they occur in prominent positions that host topicalized and focused expressions. It is assumed in the Cartographic framework, as advocated by Cinque and Rizzi (2008), Mao and Meng (2016), Rizzi (2014),

Bilola (2013), and Sanchez (2010), that left peripheries of nominal expressions are presumed to host information structural notions of topic and focus. For instance, Bilola (2013) posits that discourse-related features move from their original positions to specifier positions in the left periphery to receive informational structural notions such as focus or topic. In *igiHa*, I posit that the information structural properties of focus are mostly articulated in the pre-nominal position with demonstratives.

I posit that the Determiner pre-prefix that occurs with the lexical head noun which follows the pre-nominal demonstrative is associated with an additional emphatic reading with contrastive/identificational focus, invoking proposals by Repp (2010, 2014, 2016). The lexical head noun in the DP dominating by a pre-nominal demonstrative that occurs with the Determiner pre-prefix can be construed to have an interpretation that the referent expresses a contrast to other possible referents in the given context, as illustrated in the following examples:

(17) **Uwo umwanya** Databuja abwira Aburhamu ati, “N’uve mwintara yawe...”

u- u- o (u) mu-anya Databhja a- bwir-a Aburhamu ati ni -u- va- e
 Ppfx-3-DEMrt Ppfx-3- time Lord AgrS-tell-PRES Abraham that COP-2PL-leave- SBJV
 mu- i- n- tara i- a- we
 18LOC- Ppfx- 9/10-country Agr- GEN-2SG

That time (different from others) the Lord told Abraham that, “Leave your country...”
 (Genesis 12:1).

In the example provided above the speaker in the discourse, context is conscious that the audience knows that there have been many times the Lord has been assigning Abraham to perform certain activities. Consequently, the speaker has a specific time in mind that is familiar to himself/herself and the addressee through common knowledge. The presence of the Determiner pre-prefix on the lexical head noun encodes the reading to the hearer of particularizing the specific time in which the Lord told Abraham to leave his country, from many other times which are implicitly known in the discourse of the scriptures. In this regard, the Determiner pre-prefix introduces the information structural feature of contrastive focus. The focus employed is mainly the ‘focus-as-alternatives’, or selectiveness, or contractiveness. Therefore, the referent ‘time’ in (17) above is contrasted from other alternative times which are implicitly known, along the lines of Repp’s (2016) proposal of implicit/explicit alternatives. The same interpretation is encoded in (16), where the DP **ayo amavuta** ‘those oils’ encodes features of [+definiteness, +specificity, +contrastive focus].

Furthermore, this study suggests that igiHa demonstratives may encode the referent in an ongoing context in line with the views of Lyons (1999) and Diesel (1999). Diesel (1999) identifies two ways through which a demonstrative may be used to track the referent in an ongoing discourse, namely a noun and textual anaphor. In this regard, the igiHa demonstrative is considered to assume the role of nominal phrase anaphor when the nominal expression is understood as the antecedent of the demonstrative, as demonstrated in (17). In another way, the igiHa demonstrative is considered assuming the reading of a textual anaphor when a text, paragraph, or whole story works as an antecedent of the demonstrative, as exemplified (18).

- (18) Abagabo bagenda kuragira **inka** mwiporo. **Izo (i)nka** ziraumba chane.
 a - ba-gabo ba - gend-a ku-ragir-a i - n-ka mu i- Ø -poro.
 Ppfx-2-man AgrS-go-PRES INF-keep-FV Ppfx-9/10-cow LOC18-Ppfx-5-bush
 i - zi - o i - n - ka zi - ra - urumb-a chane
 DEMrt-10-MEDIAL Ppfx-9/10-cow AgrS-PRES-loiter-FV much
 ‘Men go to keep cows in the bush. **Those cows** loiter much.’

- (19) Abaana ba mukuru wanje basoma kwishure ya kurere. Kira musu bagenda n’ukugaruka bwa’maguru. Ntaa mahera bafise y’ukurira imotoka. Nyamare **abo (a)baana** ntibasiba kugenda kwishure n’izuba na rimwe.

‘My brother’s children study in the school located very far from here. They walk to school daily. They don’t have a fare for boarding a bus. However, **those children** never fail to attend school even for a single day.’

In the example (18) above, the noun phrase anaphor occurs in the context where the already mentioned referents are tracked by demonstratives. The speaker introduces the noun **inka** ‘cow’ in the first utterance without a demonstrative. In the subsequent utterance, the speaker uses the demonstrative **izo** ‘those’ to refer to the previously mentioned noun **inka**. I posit that in this discourse segment, the lexical noun is mentioned repeatedly since there may be a possibility of being more than one noun phrase in the previous discourse.

Diesel (1999) contends that the antecedent may occur in the immediate previous discourse, or distant from the anaphoric demonstrative. In (19) the antecedent of the noun phrase anaphor **izo inka** ‘those cows’ is in an immediately previous context in which the antecedent **inka** ‘cows’ is mentioned. By contrast, in (19), the noun phrase anaphora **abo baana** ‘those children’ is distant from its antecedent.

I posit, in line with the views of Diesel (1999), that the igiHa demonstrative can have a textual anaphoric function. According to Diesel (1999), the demonstrative can be used to refer to a portion of the discourse of an event. In this context, there is no specific noun existing in the previous discourse that is pointed at. In this regard, Himmelmann (1996) discusses the condition that the proposition referred to must be positioned in the immediate adjacent discourse. The igiHa textual anaphoric demonstrative adheres to this condition, as exemplified below:

- (20) Duhora tugenda mwiporo guhiiga ibikoko. Twiishe igikoko turagabura kira muntu akaronka igisate chage. Nyamare, hariho abaantu bamwe bahora banyegeza ibikoko (i)vyo biishe kuko batagomba kugabura n'abandi. **Idyo** rihora rishisha abantu benshi.

'Often we go in the bush to hunt animals. When we kill an animal, we divide each one gets his portion. However, some people hide the animals (specifically) what they kill because they don't want to divide with others. **That** makes many people angry.'

The demonstrative **idyo** 'that' in the example above does not refer to the particular noun that has been already established in the previous context but refers to the proposition **bahora banyegeza ibikoko (i)vyo biishe...** 'they hide the animals they kill...' which is in the immediate adjacent discourse. This proves that the igiHa demonstrative can occur with an antecedent that exceeds the scope of a determiner phrase, namely a clause or even a paragraph. However, since this study is limited to the nominal domain, I will not discuss this kind of anaphoric role.

I argue in this chapter that the igiHa demonstrative may occur in one of two positions, either after the lexical head noun as N-Dem, or preceding the lexical head noun, uncanonically, as Dem-N. However, I postulate that deictic demonstratives tend to occur in the post-nominal position while anaphoric demonstratives mostly occur in the pre-nominal position. The examples in (21a-b) illustrate the demonstrative positions in the igiHa DP.

- (21) a. Umukinyi agomba **umupira uwu**.
 u - mu-kinyi a - gomb-a u-mu-pira u - u - Ø
 Ppfx-1-player AgrS-want-Pres Ppfx-3-ball DEMrt-3-PROX
 'The player wants this ball.'

b. **Abo (a)baana** barakunda imyagi⁴

⁴ The pre-nominal demonstrative is postulated by Harjula (2004) to occur with no Determiner pre-prefix on the lexical head noun. However, this study argues that the Determiner pre-prefix occurs optionally in the inflectional

a - ba - o (a) - ba-ana ba - ra - kund-a i - mi - agi
 DEMrt-2-MEDIAL (Ppfx)-2-child AgrS-PRES-like-PRES Ppfx - 4 - sugarcane
 ‘Those children like sugarcanes.’

In (21a), the demonstrative occurs after the noun while in (21b), it precedes the lexical head noun with an optional Determiner pre-prefix. The occurrence of the optional Determiner pre-prefix in (21) adds specificity/emphasis that gives the referent a more specific reading than any other possible children available in the discourse context.

Furthermore, the igiHa locative demonstrative copulatives (LDCop) can also occur either before, as in (22a), or after the lexical head noun, as in (22b), like other demonstratives, as exemplified below. When the LDCop occurs in the pre-nominal position, the lexical head noun obligatorily retains its Determiner pre-prefix, as the ungrammatical construction demonstrates in the example (22c) below, as opposed to other ordinary demonstratives which permit an optional Determiner pre-prefix realized with the lexical head noun.

(22) a. **Ngaba (a)baana** habakina umupira.

n - ki - a - ba (a) - ba-aana ha - ba - kin - a u - mu-pira
 LDCop-5-DEMrt-2 (Ppfx)-2- child PRES-AgrS-play-FV Ppfx- 3-soccer
 ‘Here they are children playing soccer.’

b. Umwaana **nguwuya**.

u - mu-aana n - ki - u - u - ya
 Ppfx-1-child LDCop 5-DEMrt-1 - DISTAL
 ‘There are the children.’

d. *Ngikiya gitabo

n - ki - Ø - ki-ya ki-babo
 LDCop-5-DEMrt-5-DISTAL 7-book
 ‘There is a/the book.’

The occurrence of the obligatory Determiner pre-prefix in the inflection of the lexical head noun that is preceded by the LDCop is associated with the discourse-pragmatic features of specificity and contrastive focus.

morphology of the lexical head noun with certain discourse-pragmatic role as it is well discussed in the preceding sections.

4.2.4 The occurrence of the demonstrative without an overt lexical head noun

This sub-section examines the occurrence of the demonstrative in a DP containing an NP dominated by a phonologically empty lexical head noun. Diesel (1999) employs the term ‘pronominal’ to refer to a nominal expression of this kind. As was discussed in chapter two of the current study, in the generative perspective, Alexiadou et al. (2008) consider a pronominal expression as the phonologically empty head that represents an elliptic noun. They further posit that pronominals are termed as demonstratives that modify a DP headed by a phonologically empty head *pro*. In this respect, this study adopts the term ‘*pro* head category’. The reason for this preference is that the generative syntax (which is assumed in this study) posits that modifiers do not change their status when there is no full lexical head as posited by Visser (1984). Since the *pro* head category is associated with DPs headed by a phonologically empty nominal category, the assumption is made regarding the discourse context, that the addressee is familiar, or is in the position to identify the intended referent. Consider the following examples:

- (23) A: Umwaana agomba **igitabo** ichahe?
 u - mu-aana a - gomb-a i- ki-tabo i - ki-ahe
 Ppfx-1- child AgrS-want-PRES Ppfx-7-book Ppfx-7-which
 ‘Which book the child wants?’
- B: Agomba **icho**.
 a - gomb-a i - ki-o
 AgrS-want-PRES DEMrt -7-MEDIAL
 ‘S/he wants **that one**.’

When the referent is used in the discourse context where there are other entities of the same kind, the syntactically represented *pro* head demonstrative is accompanied by either a gestural point, an eye gaze (if the referent is in the physical context), or other modifiers like an adjective, or relative clause to guide the hearer to locate the specific referent (if the referent is denoted in the distal deictic context). Consider the following examples:

- (24) A: Ugomba ivoka idyahe?
 u- gomb-a i- Ø-voka i- ri-ahe
 2SG-want-PRES Ppfx-5-avocado Ppfx-5-which
 ‘Which avocado do you want?’
- B: Je ngomba **riya (i)rinini**.
 je n - gomb-a Ø - ri-ya ri-nini
 me AgrS-want-PRES DEMrt-5-MEDIAL 5-big
 ‘I want the big one.’

In the examples above (24), the DP with the *pro* head **riya** ‘that’ is modified by another modifier **rinini chane** ‘the biggest’. In this regard, the addressee is aware of what is being referred to. The 5DEM **-ya** is argued to refer to entities that are distant from the physical discourse context. Therefore, the addition of the adjective **rinini chane** ‘the biggest’ guides the hearer(s) to identify the referent (antecedent) that was already mentioned in the previous discourse. The occurrence of the Determiner pre-prefix in the inflection of the adjectival stem is associated with a reading of additional specificity and the information structural feature of contrastive focus. It is also associated with Determiner Phrase predication ($D_{Pred.}$), as will be discussed in chapter five.

The *pro* head demonstrative has an anaphoric role even when its antecedent lexical head noun is not mentioned in discoprior urse. However, the proposition referred to must be in the immediate adjacent context. The following examples demonstrate this interpretation:

- (25) A: Wararimye umurima?
 U - a- ra - rim-ye u - mu-rima
 2SG-PAS-PRES-dig-PERF Ppfx-3 – farm
 ‘Did you hoe the other farm?’
- B: Eka! Ndari ndang’woye amagwa.
 Eka n - ra - ri n - ra - ng’w-ye a - ma-gwa
 no 1SG TAM-be 1SG-PRES-drink-PERF Ppfx-6-alcohol
 ‘No! I had drunk some alcohol.’
- A: **Icho** kiragutwaye ubwenke bwawe.
 I - ki-o ki - ra - ku - twar -ye u - bu-enke bu -a - we
 DEMrt-7-MEDIAL AgrS-PRES-OM-take-PERF Ppfx -15 – brain 15-POS-2SG
 ‘That (the ball) is the specifically the one took your brain.’

The demonstrative **icho** ‘that’ does not point to any particular noun in the adjacent context, but it refers to the action of drinking alcohol which is expressed by the clause **ndari ng’woye amagwa** ‘I had drunk some alcohol’.

Nevertheless, there is a certain context of discourse where the noun phrase anaphor may be used without a lexical head, i.e., with a *pro* head. In the following example, the demonstrative **umwo** ‘in that’ is associated with the noun phrase headed by a phonologically empty category *pro* on the assumption that the audience can retrieve the referent (antecedent) that has already been mentioned in the discourse. Consider the following example:

- (26) Abaana baari birukana impene. Iyo mpene yinjira mwinzu. Abaana baama bayirondera nyamare ntibayibonye. Hanyuma, barabona ibinono vy’impene vyinjira **mwinzu**. Barabaza umuvyeyi ari **munzu** bavuga ngo,

‘Urabonye impene munzu?’ Umuvyeyi arabishura avuga ngo, ‘iyo impene yinjiye **umu**.’

‘Children were chasing a goat. That got entered in **a house**. The children remained to find it, but they didn’t see it. Later, they saw the goat’s footsteps towards **the house**. They asked the old woman who is inside the house, ‘have you seen a goat inside the house?’ The old woman replied by telling them that, ‘The goat has entered **in this** [house].’

The demonstrative **umu** ‘in this’ has an anaphoric reading since it refers to the already mentioned referent **mwinzu** ‘in house’.

Similarly, the locative demonstrative copulative (LDCop) can appear without a full lexical head noun, hence a *pro* head when the referent is familiar to the interlocutors. For the LDCop to occur with a *pro* head, there must be no ordinary demonstrative that may either precedes or follow the LDCop.

- (27) A: Umwigisha agomba **igitabo** (i)gishasha. Kiri hehe?
 u - mu-igisha a - gomb-a i - ki-tabo (i)-ki-shasha. ki - ri he?
 Ppfx-1-teacher AgrS-want-FV Ppfx-7-book (Ppfx)-7-new. AgrS-Cop Q.where?
 ‘The teacher wants a new book. Where is it?’
- B: Ngicho [while pointing it or putting an eye gaze]
 n - ki- i - ki-o
 LDCop -5-DEMrt-7-MEDIAL
 ‘It is that one.’

Irrespective of the syntactic position in which the demonstrative occurs, that is, whether it occurs as Dem-N or N-Dem, or with a *pro* form, the igiHa demonstrative frequently has the function of leading the addressee to a particular and identifiable entity or location in the discourse context of an utterance. The purpose of giving a detailed discussion on the morpho-syntax of the igiHa demonstrative is to explain that the choice of the form of the demonstrative depends on various factors. Among these, is the distance of the referent from the deictic center, or the distance in terms of when the referent was last mentioned in the discourse.

4.2.5 The co-occurrence of two demonstratives in one DP

Both pre-nominal and post-nominal demonstratives can co-occur in the same nominal expression in igiHa. In such discourse of co-occurrence, a pointing gesture cannot be involved. When two demonstratives occur, emphasis or specificity is introduced which is encoded in the particular

DP. However, these demonstratives must preferably be the same. For instance, the DP constituent investigated during this research reveals that the *igiHa* locative demonstrative copulative (LDCop) cannot co-occur with any other ordinary demonstrative in the same nominal expression, possibly due to it having a clausal internal structure. The native speakers of *igiHa* who were consulted to give their views on the grammaticality and acceptability of *igiHa* DP constructions that express the co-occurrence of an LDCop with any other ordinary demonstratives maintained that such constructions are ungrammatical and unacceptable (28b). Thus, it is concluded that the same demonstratives preferably co-occur within one nominal domain in *igiHa* (28a).

- (28) a. **Uwu (u)**mupira **uwu** utawuheveye wewe, wuragutwara ubwenke!
 u- u (u)mu-pira u - u-Ø u- ta- u- heb- ye n - ra - ku-ku- bit - a
 Ppfx-3 (Ppfx)-3- ball DEMrt-3-PROX 2SG-NEG-OM-abandone-PERF 2SG-PRES-OM-INF-beat-FV
 Literal meaning: This ball this if you don't abandon you.
 'I will beat you If you don't stop playing this ball [emphasized]'

- b. ***Uwu (u)**mupira **nguwu** utawuheveye wewe, wuragutwara ubwenke!
 u- u (u)mu-pira n- ki-u u- ta- u- heb- ye n - ra - ku-ku- bit - a
 Ppfx-Agr (Ppfx)1- ball LDCop-7-3 2SG-NEG-OM-abandon-PERF 2SG-PRES-OM-INF-beat-FV
 Lit: This ball specifically this if you don't abandon you.

The construction above could remain with only one demonstrative, but the co-occurrence of two identical demonstratives provides an additional emphasis/specificity. In the discourse context, it then has the reading that the speaker is insisting that if the addressee would not stop spending more time playing soccer something bad will happen to him/her. In this example, the post-nominal demonstrative has a deictic function while the pre-nominal demonstrative encodes an emphatic or anaphoric reading. When a DP contains both a pre-posed and post-posed demonstrative, the feature of additional emphasis is expressed on the modified lexical head noun. Since a single pre-nominal demonstrative can emphasize a lexical head noun, the occurrence of an additional post-nominal demonstrative introduces the reading of intensifying an already emphatic lexical head. The pre-prefix may also be added to the lexical head noun to expand the intensity of emphasis. In this regard, the lexical DP with identical demonstratives is interpreted with an additional intensive emphasis which in turn encodes such DPs as definite, referential, and specific.

4.2.6 The co-occurrence of the demonstrative with the Determiner pre-prefix

Examples investigated in this study demonstrate that there is an interaction between the pre-nominal demonstrative and the Determiner pre-prefix. This has been established from natural conversations of native speakers of igiHa and certain written texts. The following example (29a-b) collected from Rugemalira (2007:144-145) demonstrates that the pre-nominal demonstrative can occur with the Determiner pre-prefix in igiHa.

- (29) a. **baya abantu** banje basore bataanu bimbele biTabora bamenya izina
 ba-ya a - ba-ntu ba - a - nje ba-sore ba-taanu
 2-DIST Ppfx-2-person Agr-GEN-1SG Agr-good Agr-five
 ba - i - mbere ba - i - Tabora ba-meny-a i-Ø-zina
 2-LOC23-first 2-LOC23-Tabora 2-know-PRES Ppfx-Ø-name
 ‘Those first five good people of mine from Tabora who know the name’
- b. **baya abantu** bataanu bose banje...
 ba-ya a - ba-ntu ba -taanu ba -ose ba - nje
 2-DIST Ppfx-2-person 2-five 2 - all 2-1SG
 ‘All those five people of mine...’

The examples in (29a-b) above illustrate that the pre-nominal demonstrative appears with a lexical head noun the has the Determiner pre-prefix.

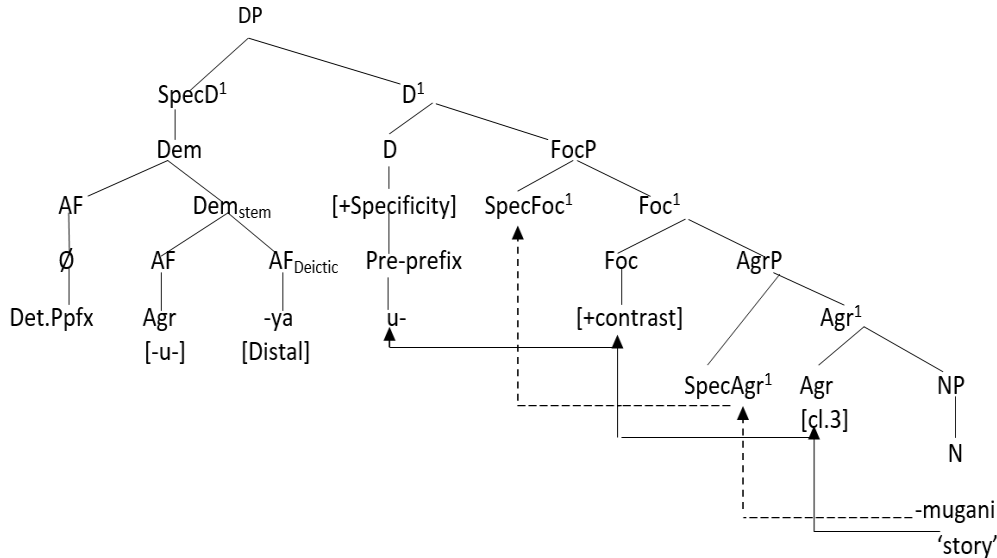
The extract in (30) below obtained from a natural discourse segment when the researcher conducted a natural conversation with an elderly native speaker of igiHa, illustrates that the pre-nominal demonstrative interacting with the Determiner pre-prefix within igiHa nominal domains.

- (30) Imigani iyo inkomoko zayo ntibayisigura neza. Umugani wa ‘Nyarema’ ntawo bayoboye kunsigurira. Abahumure twaganiriye ntibashoboye kunsigurira neza aho **uwo umugani** ukomoka. Umutama wumwe niwo yavuze ati, “Abaha bakera bari bachiye ubwenge, baragendereza ikintu, bamaze kubona ko kibaye inchuro nyinshi baraheza bagacha umugani kugirango n’abandi bazovuka munyuma bazokwiyubare gukora **icho ikintu**.” Uwundi nawo yavuze ko kuva kera ntaarindi, umuntu akiri muto yabwirizwa kwubaha abageze mu zabukuru.

‘The origin of this story is not well explained. They were not able to explain the origin of the story of ‘Nyarema’. The experts we spoke to, was not able to explain to me exactly where **that [specifically already known] story** came from. One old man is the one who said that “The ancient Baha were smart, they did something, and when they saw that it happened many times, they went on to tell a story so that others who would be born later would be careful to do **that thing** [the same thing of telling story].” Another said that from time immemorial, a young person had to respect the elderly.’

In the discourse context of example (30), the speaker consistently uses a Determiner pre-prefix on nouns preceded by a demonstrative. The majority of the igiHa native speakers who were consulted to explain the possible interpretation of the additional Determiner pre-prefix in a nominal expression containing a pre-nominal demonstrative suggested that the Determiner pre-prefix adds a significant emphasis to the referent. Since demonstratives are assumed in this study to bear intrinsic features of definiteness and specificity, and since this study associates the additional emphasis/specificity with the pre-nominal demonstrative which is uncanonical (or marked) in igiHa, I argue that the occurrence of the Determiner pre-prefix in the nominal expression containing a pre-nominal demonstrative encodes discourse-pragmatic readings such as additional specificity and intensive emphasis that interact with contrastive focus, as postulated by Repp (2010, 2016). The DP [**uwo umugani**] ‘that specifically known story’ in (30) can be interpreted to be contrastive with other alternative stories in the discourse. The discourse participants in the context of the conversation in (30) know that there are many other stories whose origins were not well explained. These stories are explicitly introduced in the discourse in the first utterance. By use of the Determiner pre-prefix on the inflection morphology of the lexical head, a particularized reading of the referent ‘the story of Nyarema’ is introduced, which contrasts with other alternative stories which are explicitly mentioned in the preceding utterance. The contrastive focus encoded on this referent is closely related to the interpretation given in terms of the notion of explicit alternatives proposed by Repp (2016). Considering such interpretative features expounded in (30) above, the phrase structure of the DP constituent [**uwo umugani**] is as follows:

- (31) The Phrase Structure of the DP [**uwo umugani**] in the igiHa sentence in (30) above:



In the Phrase Structure above, the focused constituent [**umugani**] ‘the specific story’ moves successive cyclically to the SpecFoc¹ position, where it then occurs in a Specifier-head relation with the Focus head, a relation similar to the relation of the Spec-head agreement. Thus, the relation between the focused constituent and the Focus head is viewed as being a Focus agreement relation in DP analogous to the Focus relation in the clausal structure proposed by Mursell (2016).

4.2.7 The co-occurrence of the demonstrative and nominal modifiers with a neutral feature of (in)definiteness

This sub-section investigates the co-occurrence of the demonstrative and other nominal modifiers with a neutral semantic feature of (in)definiteness and (non)specificity. The sub-section explores the question of whether the order of the modifiers within the igiHa nominal domain is fixed or variable. It further examines the discourse-pragmatic interpretations encoded by the co-occurrence of the various nominal modifiers with different semantic features. In this regard, as stated in the previous section, the demonstrative is viewed as inherently definite and specific, while nominal modifiers with a neutral feature of specificity include the adjective, the numeral, the possessive, and the clausal relative. For the sake of the economy of space, this section will examine the co-occurrence of the demonstrative and two other nominal modifiers, which are the numeral and the clausal relative.

4.2.7.1 The co-occurrence of the demonstrative with a numeral

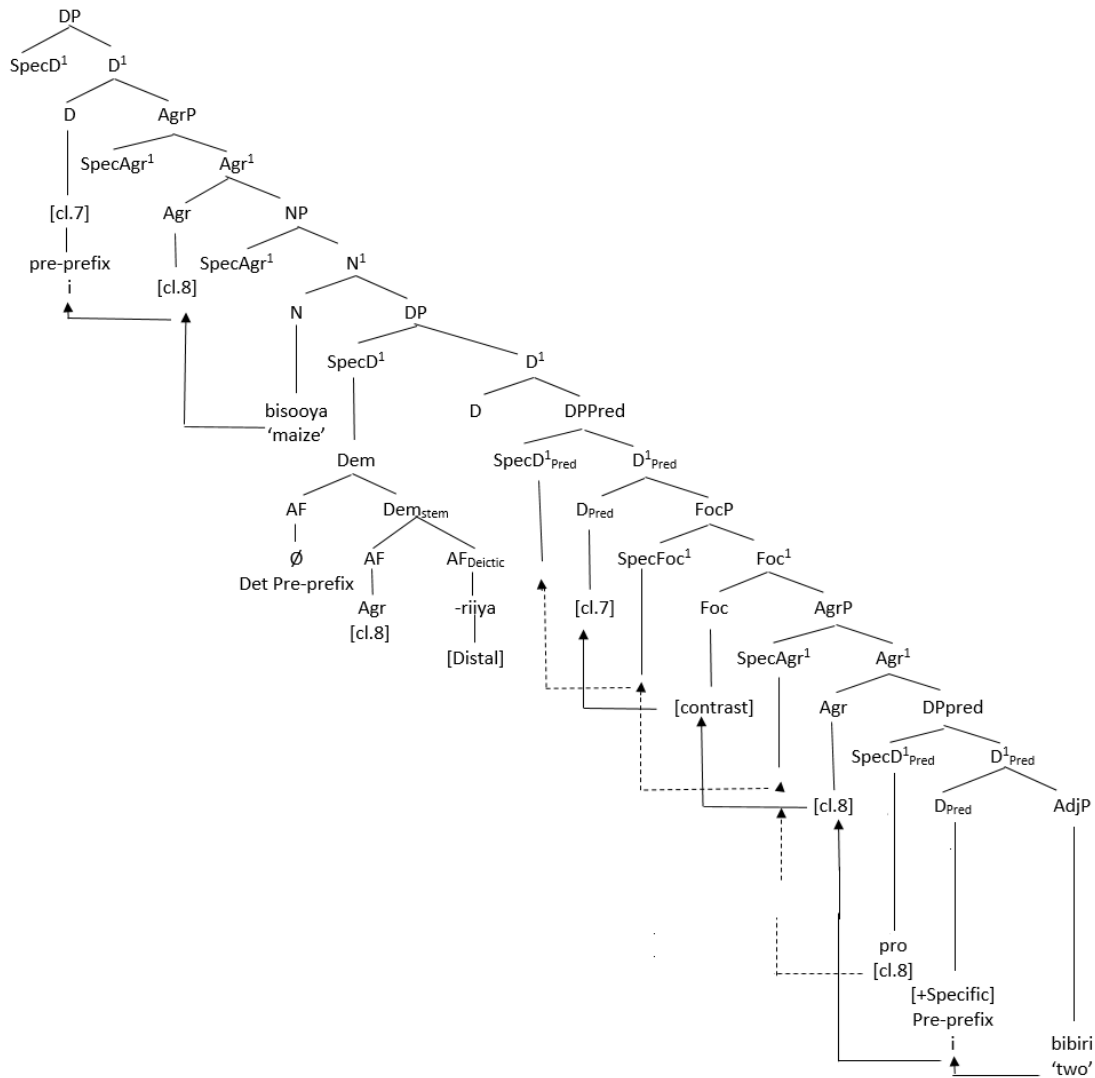
As will be discussed in the following Chapter Five, the *igiHa* numeral possesses an inherently neutral feature concerning the semantic features (in)definiteness and (non-)specificity. The co-occurrence of the numeral and demonstrative in different word orders such as N-DEM-NUM, N-NUM-DEM, DEM-N-NUM, DEM-NUM, and NUM-DEM is common. For instance, when the demonstrative co-occurs with the adjective, the preferred word order of the co-occurrence of the demonstrative and the numeral is N-NUM-DEM. In this order, the demonstrative is used for deictic purposes, whereas the word order N-DEM-NUM frequently occurs as a style of speakers in natural conversations. The pre-nominal demonstrative functions as an anaphor demonstrative.

- (32) a. Inkoko yiranobora **ibisoya biriiya (i)bibiri**.
 i - n - koko i - ra - nobor-a i - bi-soya Ø - bi-riiya (i)- bi-biri
 Ppfx-9/10-hen AgrS-PRES-peck-FV Ppfx-8-grain DEMrt-8-DIST (Ppfx)-7-two
 ‘The hen pecks these (specifically) two grains.’
- b. Inkoko yiranobora **ibisoya (i)bibiri biriiya**.
 i - n - koko i - ra - nobor-a (i) - bi-soya bi-biri Ø - bi-riiya
 Ppfx-9/10-hen AgrS-PRES-peck-FV (Ppfx)-8-grain Agr-two DEMrt-8-DIST
 ‘The hen pecks these (specifically) two grains.’
- c. Inkoko yiranobora **biriiya (i)bisoya (i)bibiri**.
 i - n - koko i - ra - nobor-a Ø - bi-riiya (i) - bi-soya bi-biri
 Ppfx-9/10-hen AgrS-PRES-peck-FV DEMrt-8-DIST (Ppfx)-8-grain 8-two
 ‘The hen pecks these(specifically) two grains.’
- e. Inkoko yiranobora **biriiya (i)bibiri**
 i - n - koko i - ra - nobor-a Ø - bi-riiya (i) - bi-biri
 Ppfx-9/10-hen AgrS-PRES-peck-FV DEMrt-8-DIST (Ppfx)-8- two
 ‘The hen pecks those (specifically) known two
- f. Inkoko yiranobora **ibibiri biriiya**.
 i - n - koko i - ra - nobor-a (i) - bi-biri Ø -bi-riiya
 Ppfx-9/10-hen AgrS-PRES-peck-FV (Ppfx)-8-two DEMrt-8-DIST
 ‘The hen pecks specifically two those (maize).

Numerals, like adjectives, possess a neutral semantic feature concerning (in)definiteness and (non-)specificity. As stated in regard to (32a), the *igiHa* numeral does not canonically take a Determiner pre-prefix in its inflection when it appears with an overt lexical head. When it takes a Determiner pre-prefix, it is uncanonical (i.e., marked) but associated with certain discourse-pragmatic interpretations discussed below. When the numeral co-occurs with a demonstrative in a nominal expression that is headed by a phonologically empty category *pro* and the

demonstrative precedes the numeral stem, then the numeral can take an optional Determiner pre-prefix, as in (32d). The numeral takes an obligatory Determiner pre-prefix when it occurs before the demonstrative in a nominal domain with a *pro* head, as in (32e). Furthermore, it is optional for the numeral to take a pre-prefix when it occurs in a DP headed by an empty *pro* category without any other modifiers, as indicated in (32d). The occurrence of the optional pre-prefix with numerals denotes the reading of contrastive focus and additional emphasis. The presence of the demonstrative is associated with definite and specific readings, as will be further argued in Chapter Five of this study. The occurrence of the Determiner pre-prefix on the inflection of nominal modifiers in igiHa is posited as representing a Determiner predicate (D_{Pred}) which heads the DP predicate (DP_{Pred}) above the Focus Phrase. The interpretative properties of the DP constituent in a sentence (32a) above can be represented as follows:

- (33) The Phrase Structure of the DP [uwo umugani] in igiHa sentence:
 Inkoko yiranobora **ibisoya biriya ibibiri**.
 ‘The hen pecks these (specifically) two grains.’



In the Phrase Structure representation above, the focused constituent **ibibiri** ‘specifically the two’ moves successive cyclically to the SpecFoc¹ position, where it then occurs in a Specifier-head relation with the Focus head, a relation similar to the relation of the Spec-head agreement. Thus, the relation between the focused constituent and the Focus head is viewed as being a Focus agreement relation in DP analogous to that for the clausal structure proposed by Mursell (2016).

4.2.7.2 The co-occurrence of the demonstrative with the clausal relative

Another nominal modifier that can co-occur with the demonstrative in the igiHa nominal domain is the relative clause. When the demonstrative co-occurs with relative clauses, the igiHa DP realizes different possible orders. The most preferred word orders are N-DEM-RC, DEM-N-RC,

DEM-RC, and RC-DEM. In igiHa, the relative clause (RC) cannot precede the demonstrative. In the first order of N-DEM-RC, the demonstrative has a deictic function of locating the referent. In the latter order, the demonstrative is used anaphorically.

- (34) a. **Umupira uwu wougomba ni mubi.**
 u - mu-pira u - u - u - o - u - gomb-a ni mu-bi
 Ppfx-3-ball DEMrt- 3-PROX 3-REL AgrS-want-FV Cop 3-bad
 ‘This ball you want is bad.’
- b. **Umupira (u)wougomba uwu ni mubi.**
 u - mu-pira u - u - o - u - gomb-a u - u - Ø ni mu-bi
 Ppfx-3-ball (Ppfx) -3-REL-AgrS-want-FV DEMrt-3-PROX Cop 3-bad
 ‘This ball you want is bad.’
- c. **Uwu (u)mupira wougomba ni mubi.**
 u - u - Ø (u) -mu-pira u - o - u - gomb-a ni mu-bi
 DEMrt- 3-PROX (Ppfx)-3-ball 3-REL-AgrS-want-FV Cop 3-bad
 ‘This ball you want is bad.’
- d. **Uwu (u)wougomba ni mubi.**
 u - u - u - Ø (u) -mu-pira u - o - u - gomb-a ni mu-bi
 DEMrt- 3-PROX (Ppfx)-3-ball 3-REL-AgrS-want-FV Cop 3-bad
 ‘This known one (specifically) you want is bad.’
- e. **Uwougomba uwu ni mubi.**
 u - u - u - Ø (u) -mu-pira u - o - u - gomb-a ni mu-bi
 DEMrt- 3-PROX (Ppfx)-3-ball 3-REL-AgrS-want-FV Cop 3-bad
 ‘This known one specifically you want’.

As in the case of other nominal modifiers, the pre-nominal demonstrative has an anaphoric function. It has been argued in this study that the pre-nominal demonstrative encodes specificity. From this point, the presence of an optional pre-prefix encodes an additional emphasis on the referent. The additional emphasis entails that the DP has a contrastive focus reading.

4.3 Anaphoric determiners

Determiners are elements that particularize the referent expressed by the nominal element. They belong to a closed set of mutually exclusive items. In this study, I identify three elements that are viewed to be determiners, other than ordinary demonstratives. These are the grammatical morphemes **-áá**, **-áá-ndi**, and **nya-**. Similarly, to demonstratives in igiHa, these grammatical root morphemes **-áá**, **-áá-ndi**, and **nya-** denote the intrinsic semantic features of definiteness and specificity. None of these determiners may co-occur with a demonstrative in igiHa. The following sub-sections examine the morpho-syntax and discourse-pragmatic use of these three modifying determiners.

4.3.1 The anaphoric determiner -áá

The element **-aa** is a free grammatical element that is not affixed to a lexical noun. It is used to point in conversations to the referent that has already been established in the mind of the discourse participants. It can be translated in English as ‘the other known one’. In an igiHa natural language conversation, the root morpheme **-áá** is used when referring to an entity already mentioned earlier (anaphoric reference). It is used when the referents are not in the visible discourse context of interlocutors, but the interlocutors have common knowledge about the referents. Thus, I refer to it as an anaphoric determiner **-áá**. In addition, I postulate that it does not only have an anaphoric role but also expresses a referential emphasis. Therefore, I propose that this element be referred to as an ‘anaphoric reference emphasizer’.

4.3.1.1 The morphological structure of the anaphoric determiner -áá

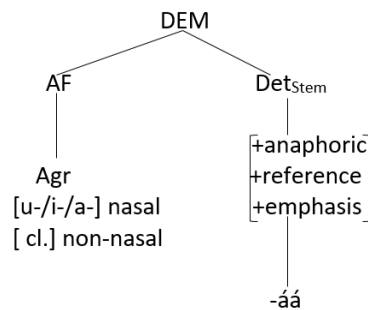
The igiHa anaphoric determiner **-áá** exhibits morphological agreement with the lexical head noun it modifies, in that an agreement prefix is affixed to it. It is formed by the grammatical root morpheme **-áá** which is affixed to the agreement prefix of the antecedent noun. Table 3 illustrates the morphological structure of the igiHa determiner **-áá**.

Table 3: The definite determiner -áá with noun class agreement prefixes

CL	Agreement prefix	Structure	Example	Gloss
1	u-	u-áá	wáá (u)muntu	‘the other man’
2	ba-	ba-áá	báá (a)bavantara	‘the other foreigners’
3	u-	u-áá	wáá (u)mwampi	‘the other arrow’
4	i-	i-áá	yáá (i)myampi	‘the other arrows’
5	ri-	ri-áá	dyáá (i)dyiso	‘the other eye’
6	i-	i-áá	yáá (a)maso	‘the other eyes’
7	ki-	ki-áá	cháá (i)gitebe	‘the other chair’
8	bi-	bi-áá	vyáá (i)bitebe	The other chairs
9	i-	i-áá	yáá (i)nzira	‘the other road’
10	zi-	zi-áá	záá (i)nzira	‘the other roads’
11	ru-	ru-áá	gwáá (u)rusengo	‘the other net’
12	ka-	ka-áá	káá gakooko	‘the other small animal’
13	tu-	tu-áá	twáá dukooko	‘the other small animals’
14	bu-	bu-áá	bwáá bwanwa	‘the other beards’
15	ku-	ku-áá	kwáá kuguru	‘the other leg’
16	ha-	ha-áá	háá hantu	‘the other place’
17	ku-	-	-	-
18	mu-	-	-	-

In the above table, the root of the anaphoric determiner **-áá** occurs with almost all noun classes except for locative classes 17, 18, and 23 which seem to be incompatible with the anaphoric determiner **-áá**. Where necessary, the anaphoric determiner **háá** in locative class 16 may extend to classes 17, 18, and 23. The anaphoric determiner **-áá**, for the nasal classes 1, 3, 4, 6, and 9 displays unique features from the rest, in the sense that their agreement prefixes are not identical to the noun class prefix. The agreement prefixes of these classes lack the consonant that occurs in the non-nasal noun class prefix. In this regard, a compensatory glide formation turns **i-** into **y-** when followed by any other vowel which is not /i/ for classes 4, 6, and 9; and **u-** changes into **w-** when followed by any other vowel which is not /u/ for classes 1 and 3. The referent which appears with the anaphoric determiner **-áá** is interpreted as “the other” (known). It denotes common knowledge that is shared by all discourse participants regarding the intended referent. To sum up, the following diagram presents the internal structure of the igiHa anaphoric determiner **-áá**.

(35) The internal structure of the igiHa determiner **-áá**



4.3.1.2 The syntactic distribution of the anaphoric determiner **-áá**

Syntactically, the anaphoric determiner **-áá** is restricted to occurring pre-nominally to its head noun. Like other pre-nominal demonstratives, the anaphoric determiner **-áá** permits an optional pre-prefix of the antecedent lexical head noun. When the pre-prefix is present, it triggers an additional feature of emphasis/specificity which introduces a reading of contrastive focus. In addition, the anaphoric determiner **-áá** neither occurs with another demonstrative in the pre-nominal nor the post-nominal position. This raises the possibility that the anaphoric determiner **-aa** may be viewed as a stronger anaphoric determiner than the anaphoric demonstrative.

- (36) a. Urabonye **yáá (a)madyoganya?**
 u - ra - bon-e i - áá (a)-ma-dyoganya
 2SG-PRES-see-PERF 6-DETrt (Ppfx)-5-peas
 ‘Have you seen the other known (no other ones) peas?’
- b. Urabonye **yáá madyoganya?**
 u - ra - bon-e i - áá ma-dyoganya
 2SG-PRES-see-PERF 6-DETrt 5 - peas
 ‘Have you seen the other [known] peas?’

The igiHa determiner **-áá** cannot co-occur with a pre-nominal demonstrative or in close proximity with any other modifiers. Furthermore, a post-nominal demonstrative cannot occur in a DP where the determiner **-aa** already appears. Generally, the use of a post-nominal demonstrative when the anaphoric determiner **-áá** already occurs in the DP encodes additional information regarding the referred entity. In the igiHa DP, this information is typically expressed by a relative clause. Therefore, the construction in (36a) is ungrammatical and unacceptable if both the anaphoric determiner **cháá** and the distal demonstrative **kiya** occur in the absence of a relative clause that modifies the same lexical head noun by introducing additional information about the referent. The anaphoric determiner **cháá** indicates that the referent is not spatially deictic but known through the common ground knowledge shared (familiarity) among the discourse participants. Thus, a deictic demonstrative cannot co-occur with the typically non-deictic anaphoric determiner **-áá**.

- (37) a. ***cháá gitabo kiya** ni kinini.
 ki-áá ki-tabo ∅ - ki-ya ni ki-nini
 Agr-DET 7-book DEMrt-7-DIST COP 7-big
 ‘The other book [known] is big.’
- b. **cháá gitabo kiya** chóakunda ni gisore.
 ki-áá ki-tabo ∅ - ki-ya ki-o - a -kund-a ni ki-nini
 Agr-DET 7-book DEMrt-7-DIST 7-REL-3SG-like-FV COP 7-big
 ‘The other book [known] is big.’

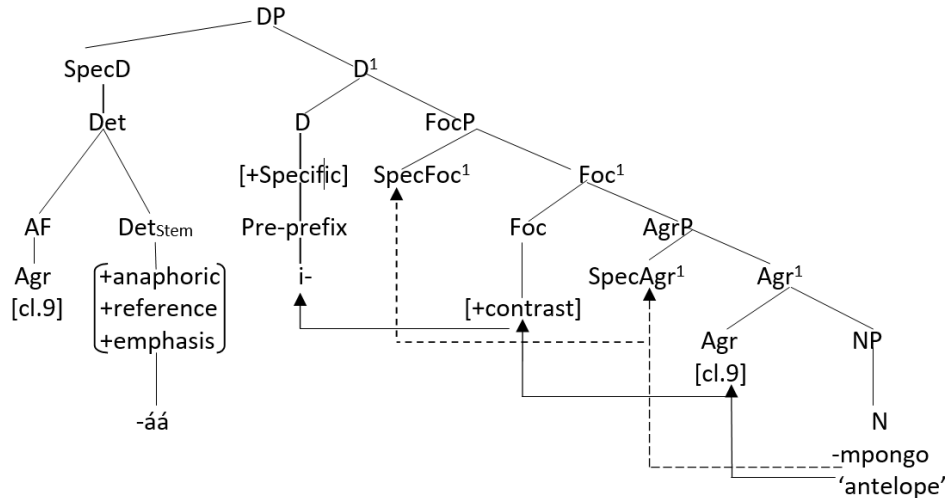
In contrast to other modifiers, the determiner **-áá** cannot occur without its lexical head noun, even if there are other modifying elements present, like an adjective possessive, or a numeral. This syntactic property expressed by the determiner **-áá** attests to the views that the determiner **-áá** could be a stronger determiner than the demonstrative in igiHa.

Regarding definiteness and specificity, the anaphoric determiner **-áá** encodes both definiteness and specificity. The referent modified by the anaphoric determiner **-áá** encodes definiteness based on the familiarity notion due to the common ground knowledge among the participants in the discourse context. It also encodes a specificity reading since the audience is familiar with the referent. The common knowledge of the interlocutors may be from the referent discourse context, or the distant discourse context, for example, if it was uttered the previous day. Therefore, the igiHa anaphoric determiner **-áá** is in complementary distribution with the pre-nominal demonstrative. Consider the following examples:

- (38) a. Mwabonye **dyáá (i)sanduku** dya **wáá (u)murazi**?
 mu- a - bon-e ri-áá ø-sanduku ri-a u-áá mu-razi
 2PL-PAST-see-PERF 5-DET 5-bag 5-GEN 5-DET 1-visitor
 ‘Did you see the other [known] bag of the other [known] visitor?’
- b. **Yáá (i)mpongo** yiroozabuka haya.
 i-áá n-pongo i - roo-zabuk-a ø - ha - ya
 9-DET 9-antelope AgrS-FUT-cross-FV DEMrt -16 -DIST
 ‘The other [known] antelope will cross there.’

In the above utterances (38a-b), the speaker assumes that the hearer has mental representations through common ground knowledge of the referents in question. Therefore, the referents **isanduku** ‘bag’ and **umurazi** ‘visitor’ in (38a) are activated by the use of anaphoric determiners **dyáá** and **wáá** respectively; and the referent **impongo** ‘antelope’ in (38b) is activated by the use of the anaphoric determiner **yáá**. In this context, the determiners in questions thus have an anaphoric function. In addition, the anaphoric determiner **-áá** permits the lexical head noun to take an optional Determiner pre-prefix, as exemplified in (37) above. In this regard, the optional pre-prefix renders an additional emphasis/specificity which interacts with a reading of contrastive focus represented in the Focus Phrase. The interpretative features of the DP constituent in the sentence (37b) described above with the Determiner pre-prefix can be represented as follows:

- (39) The Phrase structure of the DP [yaa impongo] in igiHa sentence:
Yaa impongo yiroozabuka haya.
 ‘The other [known] antelope will cross there.’



Consider the anaphoric determiner **-áá** in the utterance in the following extract adapted from Harjula (2004:176-177):

- (40) Ibingira dyaari n'igufa dyaakiikameye mumuhogo. Rinanigwa kurivaanayo. Dyaabwiiye ibikooko vyoose ati, 'Uwuroonkura igufa ndoomuha impiya nyinshi.' Ugwimba gwaaraaje rushira umunwa waago wureshe ruvaanamwo **dyaa (i)gufa**.

'The wild dog had a bone stuck in the throat. It told all animals that I will give a lot of money to anyone who will remove me from the bone. The crowned hornbill came and put its long mouth to remove **the other [already mentioned] bone**.'

The nominal expression preceded by the anaphoric determiner **-áá** is familiar among the discourse participants in that the audience can identify the referent from the common ground knowledge. Therefore, as the functional head of the *igiHa* DP, the anaphoric determiner **-áá** encodes the meaning that the speaker is confident that the audience can retrieve the referent from the previous discourse shared by all discourse participants. However, the referent is not essentially from the immediate discourse context, but it may also be from the distant discourse context. In this context, the anaphoric determiner **-áá** realizes both an anaphoric and recognitional pragmatic function. This function depends on the discourse participants having a common knowledge in their minds about the referent.

In addition, there are specific pragmatic contexts in which the anaphoric determiner **-áá** can be used for a referent located in the immediate spatial context to perform some kind of deictic function. Consider the following examples:

- (41) Raaba **cháá (i)gitabo** cho nyoko wawe aakuguriye.
 raab-a ki - áá ki-tabo ki-o nyoko a - a - a - ku-gur - i - e.
 look-FV Agr-DET 7-book 7-REL mother AgrS-GEN-2SG AgrS-PAST-2SG-buy-APPL-PERF
 ‘Look at the other [kown] book that your mother bought you?’

The discourse context of the construction in (41) shows that the referent **igitabo** ‘book’, is in the immediate situational context. The speaker may accompany the particular utterance by a pointing, gesture, or an eye gaze. The anaphoric determiner **-áá** is used by the speaker to signal the hearer(s) to turn and see the referent. Therefore, the anaphoric determiner **-áá** indicates to the audience that the noun in question is specific and identifiable in the immediate discourse context.

4.3.2 The anaphoric determiner **-áá-ndi**

Another element in igiHa that merits positing as a functional category determiner is the combination of the morpheme **-áá** and the stem **-ndi** which form the stem **-áá-ndi**. It is translated as ‘the other’ like the anaphoric determiner **-áá**. In this regard, I posit that the anaphoric determiner **-áá-ndi** is the long form of the anaphoric **-áá**.

4.3.2.1 Morphological structure of the anaphoric determiner **-áá-ndi**

The determiner **-áá-ndi** is formed by the agreement prefix of the antecedent noun which is affixed to the determiner root **-áá**. This nominal agreement prefix is duplicated and affixed to the stem **-ndi**, as illustrated in table 4. Like the anaphoric determiner **-áá**, the determiner **-áá-ndi** permits the lexical head noun with which it occurs to take an optional pre-prefix.

Table 4: The morphological structure of the determiner -áá-ndi

CL	Agreement Prefix	Example	Structure	Gloss
1	-u-	wááwundi	u-áá-u-ndi	‘the other one’
2	-ba-	báábandi	ba-áá-ba-ndi	‘the other ones’
3	-u-	wááwundi	u-áá-u-ndi	‘the other one’
4	-i-	yááyindi	i-áá-i-ndi	‘the other ones’
5	-ri-	dyááringi	ri-áá-ri-ndi	‘the other one’
6	-i-	yááyandi	i-áá-i-ndi	‘the other ones’
7	-ki-	cháákindi	ki-áá-ki-ndi	‘the other one’
8	-bi-	yáábindi	bi-áá-bi-ndi	‘the other ones’
9	-N-	yááyindi	i-áá-i-ndi	‘the other one’
10	-N-	záázindi	zi-áá-zi-ndi	‘the other ones’
11	-ru-	gwáárundi	ru-áá-ru-ndi	‘the other one’
12	-ka-	kááakandi	ka-áá-ka-ndi	‘the other ones’
13	-tu-	twáátundi	tu-áá-tu-ndi	‘the other one’
14	-bu-	bwáábundi	bu-áá-bu-ndi	‘the other time’
15	-ku-	kwáákundi	ku-áá-ku-ndi	‘the other one’
16	-ha-	hááhandi	ha-áá-ha-ndi	‘the other ones’
17	-ku-	-	-	-
18	-mu-	-	-	-
23	-i-	-	-	-

Table 4 above shows the morphological structure of the definite determiner with the stem **áá-ndi**, for noun class prefixes of all noun classes, except for locative classes 17, 18, 23, similarly to the determiner **-áá**. Like the anaphoric determiner **-áá**, the anaphoric determiner **hááhandi** in class 16 ‘the other place’ is used for classes 17, 18, and 23. Like other Bantu languages (cf. Allen, 2014 for the case of Runyankore-Rukiga), the determiner for the noun class 14 **bwáábundi** is used to refer to a certain point of time. However, the igiHa determiner **bwáábundi** refers to the time in the past. The following example shows the use of the determiner **bwáábundi**, referring to ‘time’.

- (42) Ur’ibuka **bwáábundi** bw’indege yari kudukorora?
u – ra - ibuk -a bu-áá-bu-ndi bu-o i-n-dege i- a - ri ku-tu-koror-a
2SG-PRES-remember-FV 14-DEF-14-other Agr-RL Ppfx-9/10-plane AsgrS-PAST-be INF-1PL-drop-FV
‘Do you remember the other [known] time when the plane was near to drop us?’

The use of the utterance in (42) above is more common among adults than young speakers. The older generation favors the use of **bwáábundi** while the young generation would prefer the distal demonstrative forms. For instance, in the above example (42), the young generation would prefer the demonstrative **buya** or **buriya** to the determiner **bwáábundi**.

4.3.2.2 Syntactic distribution of the determiner **-áá-ndi**

Syntactically, the igiHa determiner **-áá-ndi** strictly occurs with a phonologically empty *pro* head. It does not allow the occurrence of a lexical head noun. In (4.3.1) it was stated that the anaphoric determiner **-áá** must strictly occur with a lexical head noun. The absence of the lexical head noun is a crucial property that the long-form **-áá-ndi** has. In this regard, I argue that the long-form (anaphoric determiner **-áá-ndi**) permits a *pro* head because it contains a lexical stem **-ndi** which means ‘other’. Due to this property, the anaphoric determiner **-áá-ndi** cannot co-occur with a lexical head noun or any demonstrative. Instead, it can co-occur with other modifiers such as an adjective, numeral, possessive, and the relative clause, which can express more information about the referent. When the determiner **-áá-ndi** occurs with such modifiers they strictly maintain the word order according to which the anaphoric determiner precede any other modifiers, as illustrated in the following examples:

- (43) a. Ur’ibuka **cháákindi**?
 u - ra - ibuk - a ki-áá- ki-ndi
 2SG-PRES-remember-FV 7-DET-7-DET
 Do you remember the other [known] one?
- b. Ugomba ndakugurire **vyáákindi (i)vyirabura**?
 u - gomb-a n - ra - ku-gur - ir - e ki-áá-ki-ndi ki-irabura
 2SG-want-FV 1SG-PRES-2SG-buy-APPL- FV 7-DET-7-other 3-black
 ‘Do you want me to buy you the other [known] black (ones)?’
- c. Nyoko wawe yaagishiimye **chaakindi (i)chawe**.
 Ø-nyoko u - a - we a - a - ki-shiim-e ki-áá-ki-ndi
 1-mother 3-GEN-2SG AgrS-PAST-7-like-PERF 7-DET-7-other
 ‘Your mother had liked the other one of yours.’
- d. Chayimeni aroohamagara abantu kugabura **vyaabindi (i)bitandatu**.
 Ø-chayimeni a - roo-hamagar-a a - ba-ntu ku- gabur -a
 1 - chairman AgrS-FUT - call - FV Ppfx-2-person INF-divide-FV
 bi-áá-bi-ndi bi - tandatu
 7-DET-7-other Agr-six
 ‘The Chairman will call people to divide the other six ones.’
- e. **Dyáárindi (i)dyo ukunda** riramenese.
 ri-áá- ri-ndi ri-o u - kund-a ri- ra - menek-e
 5-DET-5-other 5-REL 2SG-like-PRES 5-PRES-brick-PERF
 ‘The other one you like has broken.’

In general, the determiner **-áá-ndi**, as a means of expressing a specifically known entity, is used when the speaker assumes that the hearer is familiar with the referent represented by the determiner **-áá-ndi**. When the speaker assumes the hearer may not immediately identify the referent represented by the determiner **-áá-ndi**, s/he may **use** other modifiers such as an adjective, possessive, numeral, or a relative clause to offer additional information about the referent, as demonstrated in the above examples (43b-e) respectively. The occurrence of an optional Determiner pre-prefix in the inflection of the adjective, possessive, numeral, and clausal relative modifiers in (43b-e) above denotes an additional specificity property to the intended referent (see Chapter Five for the interpretative functions of the optional Determiner pre-prefix in the inflectional morphology of adjectives and numerals, and Chapter Six for possessives and clausal relatives).

In terms of the discourse-pragmatic reading, the DP containing an anaphoric determiner **-áá-ndi** is interpreted as definite and specific. It is definite in terms of familiarity because the referent is assumed to be known to the speaker and the hearer. For instance, the speaker in the discourse context of (43a) above assumes that the addressee is familiar with the intended referent. In case the speaker assumes the addressee may not be aware of what is being referred to, s/he may use any modifier (adjective, numeral, possessive, or clausal relative) that expresses additional information concerning the referent as in (43b-e).

Apart from expressing familiar entities, the igiHa determiner **-áá-ndi** may be used in the utterance when both the speaker and hearer want to prevent other people present in the context to identify the referent in question. For instance, in (43a) the speaker has omitted the use of the lexical noun to hide information from other discourse participants and only uses an anaphoric determiner **cháákindi**, which s/he is sure that the hearer understands clearly because they had a common prior knowledge of the referent.

4.3.3 The anaphoric determiner **nya-**

The igiHa anaphoric determiner **nya-** is used to refer to a referent to which the interlocutors have been familiarized previously. It refers to an entity already mentioned and known to all discourse participants. It can be translated to the English ‘aforesaid’.

4.3.3.1 Morphological structure of the anaphoric determiner **nya-**

Morphologically, the determiner **-nga** is a dependent morpheme that is affixed to nominal elements, such as nouns, nominalized verbs, and adjectives to substitute for the Determiner pre-prefix. The nominalized form of the verb must appear with the infinitive morpheme **-ku-** for the verb to function as a nominal. It may roughly be translated in English as “the aforesaid.” The igiHa anaphoric determiner **nya-** usually occurs with singular referents and it does not share the agreement morphology with the nominal word to which it is affixed, contra the anaphoric determiner **-áá**. Examples (44-45) illustrate the anaphoric determiner **nya-** affixed to a noun, a nominalized verb, and an adjective respectively.

- (44) **Nyakugenda** yari umupurezida (u)mwiiza.
 nya-ku-genda a-ri u - mu-purezida u - mu-iza
 DET-INF-go Agr-be Ppfx-1-president Ppfx-1-good
 Lit: ‘The aforesaid goer was a/the good president.’
 ‘The (aforesaid) one died was the good president.’

- (45) We urahuuye na **nyamunini**?
 We u - ra -huur - e na nya-mu-nini
 2SG AgrS-PRES-meet-PERF ASS. DET-1-big
 ‘Have you met the aforesaid big one?’

The examples (44-45) demonstrate that the anaphoric determiner **nya-** may occur with other nominal modifiers, thus contrasting with the determiner **-áá** which cannot occur with other nominal modifiers in the immediate adjacent context.

4.3.3.2 Syntactic distribution of the anaphoric determiner **nya-**

Syntactically, the determiner **nya-** is in complementary distribution with the Determiner pre-prefix because they can substitute for each other. Wherever the determiner **nya-** occurs it can substitute for the Determiner pre-prefix and vice versa. Therefore, the structures in (46a-b) are considered ungrammatical and unacceptable due to the co-occurrence of the determiner **nya-** and the Determiner pre-prefix.

- (46) a. ***Nyaumugore** araziiye.
 nya -*u - mu-gore a- ra- zii- e
 DET-*Ppfx-1-woman AgrS-PRES-come-PERF
 ‘The (aforesaid) woman has come.’

b. ***Unyamugore** araziye.

The unacceptable examples above (46a-b) show that it is not acceptable for the anaphoric determiner to occur with a Determiner pre-prefix whether preceding or following it.

Concerning definiteness and specificity, the DP containing an anaphoric determiner **nya-** is definite in terms of the familiarity principle. The anaphoric determiner **nya-** is used to specify the referent that is well known by the discourse participants from previous discourse contexts. For, instance, the audience in (47) can draw the knowledge of nominal elements to which the anaphoric determiner **nya-** is affixed from the preceding discourse.

- (47) Mwijoro nyoko yaroogeje ugweeso gw'ukutekesha. Yasusemwo amaazi arakwangasha n'amaboko ahweza araseesa yáá amaazi. Yarasusemwo ayandi amaazi kandi aruugunyuzá **nyagweeso**. Hanyuma yarakataguye inyama ibihimba bitobito araziroonga acha aziteka.

'In the night mother washed a pot for cooking. She poured water in and washed it with her hands, then she poured out the other [already mentioned] water. She again poured in water and rinsed **the aforesaid pot**. Then, she cut some meat into small pieces, washed them, then cooked them.'

The anaphoric determiner **nya-** may be used to activate common ground knowledge shared by the discourse participants, especially when the speaker and the hearer want to exclude other people present in the context. In this regard, it can be used for denoting new entities which have not been mentioned in the discourse, but those entities are well known by the speaker and the addressee, as exemplified in (48a). This function seems to be similar to the recognitional (common ground) function which is alternatively expressed by the anaphoric determiner **-áá** and the distal forms of demonstrative, namely **-riiya** and **-ya**, as shown in (48b) and (48c), respectively. The same function can be realized by a distal demonstrative.

- (48) a. **Nyamuzungu** yaashise aha dyari?
 nya-mu-zungu a - a - shik- e a - ha - Ø - ri-ari
 DET-1-white AgrS-PAST-reach-PERF DEMrt-16.LOC-PROX 5-Q.when
 Lit: The aforesaid white person one reached here when?
 'When did the aforesaid white reach here?'

- b. **Wáá (u)mweeru** yaashise aha dyari?
 u- áá mu-eru a - a - shik - e a - ha - Ø ri-ari
 3-DET 1-white AgrS-PAST-reach-PERF DEMrt-16.LOC-PROX 5-Q.when
 Lit: The other one white reached here when?

‘When did the other [known] white reach here?’

b. **Wuriiya (u)mweeru** yaashise aha dyari?

Ø - u - ya mu-eru a - a - shik - e a - ha ri-ari
DEMrt-Agr-DISTAL 1-white AgrS-PAST-reach-PERF DEMrt- 16.LOC 5- Q.when

Lit: That white person reached here when?

‘When did that white person reach here?’

I have argued in this chapter that the igiHa definite determiners are inherently specific. In this regard, I posit that the anaphoric determiner **nya-** expresses a specific definite DP. For example, in example (48a), the discourse participants are speaking about the specific white man with whom they are both being acquainted. Therefore, even though the three determiners, i.e., the demonstrative, and the determiners **-áá** and **nya-** may have some disparities in their phonological and morphological structure, they seem to be related semantically. One possible question to explore is the possibility that the determiners **-áá** and **nya-** may be grammaticalized forms of the demonstrative.

4.4 Summary

This chapter has demonstrated that the igiHa demonstrative has the root morpheme **u-**. This root occurs as the core constituent of the proximal and medial demonstrative forms, and it is phonologically empty in the distal form. A possible question to pursue is that this morpheme **u-** occurs underlyingly with the anaphoric determiners **-áá**, **-áá-ndi**, and **nya-**. Regarding the anaphoric determiner **-áá**, the chapter posited that it always occupies the slot before the lexical head noun permitting no other determiner in the same position. In addition, the anaphoric determiners denote a recognitional function by stimulating common ground knowledge among the discourse participants regarding a particular referent. Furthermore, they realize the discourse-pragmatic property of anaphoric reference. Even though the three anaphoric determiners, i.e., **-áá**, **-áá-ndi**, and **nya-** may perhaps have some differences in their morphological and phonological structure, they seem to be related semantically. Possible issues for future research concerns the possibility that they can be grammaticalized elements of the pre-nominal demonstrative, or that they could have been the origin (source) of the development of the demonstratives.

CHAPTER FIVE

THE ADJECTIVE, NUMERAL, CLAUSAL RELATIVE, AND POSSESSIVE NOMINAL MODIFIERS

5.1 Introduction

The previous chapter investigated the igiHa demonstrative and anaphoric determiners, namely -**áá**, -**áá-ndi**, and **nya-** that express inherent features of definiteness and specificity. This chapter firstly examines the morpho-syntactic and discourse-pragmatic realizations of (in)definiteness and (non-)specificity in igiHa DPs containing adjectives and/or numerals. Adjectives and numerals are categorized in this dissertation as modifiers that are inherently neutral with regard to (in)definiteness and (non-) specificity features. The interpretation of the (in)definiteness and (non-)specificity features will be examined in relation to the (non-)occurrences of the pre-prefix in the inflectional morphology of each modifier. The chapter also examines the information structure features of the topic and contrastive focus interpretations of DPs concerning the (non-) occurrence of the pre-prefix in the inflectional morphology of each modifier. In this regard, this chapter posits, along the lines of Aboh (2004), that the left peripheries of nominal expressions include topic and focus projections, analogous to the CP. In this regard, the chapter postulates that the focus feature is realized morphologically by the occurrence of the determiner pre-prefix, and represented in the left peripheries of igiHa DPs containing the adjective and/or numeral. In addition, this chapter postulates that there is convincing evidence that the occurrence of the pre-prefix (additionally to the obligatory agreement morpheme occurring immediate left of the modifier) can be posited to be a category Determiner (D), which is specified for the feature [+Definite] and/or [+Specific]. From the interpretations given, I argue in this chapter, in line with views of Panagiotidis and Marinis (2011) for Modern Greek, that the igiHa adjective pre-prefix is a functional category Determiner which is further specified as a Determiner D_{Pred} since it heads a DP predication construction

The rest of the chapter is organized as follows: Section 5.2 examines the morpho-syntax of DPs with an adjective, the discourse-pragmatic interpretations of the igiHa DP containing the adjective, and the co-occurrence of the adjective with other nominal modifiers. Section 5.3 is devoted to the morpho-syntax of DP constructions with numeral modifiers, and it also examines

the related discourse-pragmatic interpretation of the DP containing the numeral and its co-occurrence with other modifiers. Section 5.4 examines clausal relatives as nominal modifiers, including its discourse pragmatic interpretations in the igiHa DP and its occurrence with other nominal modifiers. Section 4.5 examines the possessive, and section 4.6 gives a summary of the chapter.

5.2 The adjective

This section examines the morpho-syntactic structure of DPs containing an adjective as a nominal modifier. It also examines the semantic properties of (in)definiteness and (non-)specificity of igiHa DPs containing the adjective. In addition, this section examines the (non-)occurrence of the Determiner pre-prefix in the inflection of the adjective and the associated interpretations realized by the particular DP. Furthermore, this section explores the interaction between adjectives and other nominal modifiers that possess the inherent feature of definiteness, such as the demonstrative and the anaphoric determiners to determine the possible interpretations realized for such DPs. The investigation of DPs containing adjectives principally relates to the (non-)occurrence or the (optional) occurrence of the pre-prefix, posited as a functional category Determiner, in the inflectional morphology of these nominal modifiers.

5.2.1 The meaning and morphological structure of the igiHa adjective

Adjectives in igiHa are categories that can be defined in terms of three properties. First, in terms of a semantic view, the adjectival stem is considered as having certain features that are homophonous with the lexical head noun it modifies. Second, the igiHa adjectival stem is defined as exhibiting an inflectional agreement prefix corresponding to the lexical head noun it modifies. Third, an element is considered to be an adjective if it occupies a syntactic position for attributive and predicative functions. In this study, I adopt the view that adjectives describe the attributes or quality of nouns they modify in the sense that, they provide information about the noun's properties, for example, dimension, physical property, color, behavior, value, speed, and age. There are just a few proper adjectives attested in igiHa (see Harjula, 2004). This is because properties that are expressed by adjectives in other language families can be expressed by other word categories in Bantu languages such as verbs, nouns, and associative constructions. As a

Bantu language, igiHa reflects this phenomenon. With respect to their derivation, I identify two categories of adjectives in igiHa, namely proper and derived adjectives.

5.2.1.1 Proper adjectives

Proper adjectives are inherently attributive adjectives that are considered to be original, in that they have not been derived from other word categories. The set of proper adjectives in igiHa is relatively small, and it is distinguished by a partially unique set of concordial affixes. IgiHa speakers rely on other syntactic categories to express various adjectival semantic properties, specifically verbs, nouns, and associative constructions. The igiHa proper adjectives resemble the cross-linguistic uniformity of the meanings that are likely to express properties such as value, age, dimensions. Harjula (2004) identifies twelve stems that are considered to be proper adjectives, namely **-bí** ‘bad’, **-gúfi** ‘short’, **-bísi** ‘raw’, **-ííza** ‘good’, **-ké/-kéeyi** ‘a little/few’, **-kúru** ‘great’, **-níni** ‘big/large’, **-ré-re** ‘long’ (always reduplicated), **-sa** ‘empty’, **-shaásha** ‘new’, **-sóre** ‘good’, **-tóoyi/-tóori** ‘small/little/young.’ In addition to the list provided by Harjula (2004), I identify other stems of color that fall under the underived category of an adjective, namely, **-irabura** ‘black’, **-tukura** ‘red’, **-eéra** ‘white’, **-yunguyungu** ‘blue’. However, I acknowledge that the purpose of this sub-section is not to identify and examine all proper adjectives in igiHa, but rather give some background for the discussion of the morpho-syntactic features of adjectives when they occur in DP constructions with(out) a lexical head noun. Consequently, the adjectival stems given above serves as a selection, and may (not) be the only ones that occur in igiHa.

5.2.1.2 Derived adjectives

Like other many Bantu languages, igiHa can derive adjectives from verbs and nouns. Following other scholars such as Mletshe (2010), Mpofo (2009), and Makanjila (2019) I refer to the adjectives derived from verbs as deverbals and those from nouns, as denominals. Of these two types of derived adjectives, deverbal adjectives appear to be dominant in igiHa.

Regarding deverbal adjectives, an extensive number of finite verbs in igiHa regularly express various semantic qualities such as length, size, height, width, weight, age, shape. The deverbal adjectives are formed by an optional inflectional pre-prefix, the agreement prefix, corresponding

to the noun class prefix of the modified lexical head noun, and the present perfective element which is suffixed to the verbal stem. In essence, this semantic meaning realized by these deverbal adjectives is that ‘the subject has become X’ as shown in (1) below:

(1) a. Umwigishwa agomba igitabo (**i**)gitabuse?

u- mu-igishwa a - gomb-a i - ki-tabo (i)-ki-tabuk-e
Ppfx-1-learner AgrS-want-FV Ppfx-7-book (Ppfx)-7-tear-PERF
‘The student wants the (specific) torn book.’

b. We urayobora uwo (u)mupira **wuremeyer**?

We u - ra-yobor-a ku-kin-a u - u - o u-mu-pira u- remer - e
2SG AgrS-PRES-able-FV INF-play-FV DEMrt-1-MEDIAL Ppfx-1-ball 3-be heavy-PERF
‘Can you play that heavy ball?’

Concerning denominal adjectives, I posit that the available data shows that from certain nouns adjectives can be derived that express the semantic features of value, gender, and in rare cases nationalities and materials as illustrated in the following example:

(2) Wuya (u)mukobwa **ari n’umujinya**.

Ø - u-ya u-mu-kobwa a - ri na u-mu-jinya
DEMrt-1-DIST Ppfx-1-lady AgrS-be ASS-Ppfx-3-arrogance
‘That lady is arrogant.’

Some nouns do not need an associative **na** (cf. table 5 below), while others do need it (cf. table 6 below). The latter is referred to as associative denominal adjectives.

Table 5: Adjectives derived from nouns

Noun	Gloss	Example	Gloss
-kobwa	‘girl’	umwana (u)mukobwa	‘a baby girl’
-hungu	‘boy’	umwana (u)muhungu	‘a baby boy’
-goragore	‘woman’	umuntu (u)mugoragore	‘a female person’
-gabogabo	‘man’	umuntu (u)mugabogabo	‘a male person’
-pfizi	‘male (animals)’	impene (i)mpfizi	‘a male goat’
-sazi	‘mental’	imbwa (i)nsazi	‘a thief dog’
-sinzi	‘troublesome’	umwana (u)musinzi	‘a troublesome child’
-ramvya	‘thief’	imbwa (i)ndamvya	‘a thief dog’
-hozi	‘fighter’	umungere (u)muhozi	‘a fighter herdsman’
-kunzi	‘lover’	abami (a)bakunzi	‘loved kings’

By contrast, associative denominal adjective phrases are formed by the verb **-ri** ‘be’, an associative **na** with a complement noun, as illustrated by the examples in table 6:

Table 6: Associative denominals adjectives

Verb	Associative	Noun	Gloss	Example	Gloss
-ri	na	ugwanko	'selfishness'	umuhungu ari n'gwanko	'a selfish boy'
-ri	na	urujwejwe	'gossip'	umugore ari n'urujwejwe	'a gossiping woman'
-ri	na	umujinya	'arrogance'	abakobwa bari n'umujinya	'arrogant girls'
-ri	na	impaka	'argument'	umugabo ari n'impaka	'argumentative man'
-ri	na	uruda	'greedy'	infyisi yiri n'uruda	'a greedy hyena'
-ri	na	ibirakari	'angry'	indara yiri n'ibirakari	'an angry lion'
-ri	na	ibanga	'secret'	umugore ari n'ibangaa	'a secretive woman'

In general, the morphological structure of the igiHa adjective includes three elements, namely, a pre-prefix which occurs optionally, yielding a certain discourse-pragmatic reading, the agreement prefix which is homophonous with the noun class prefix of the lexical noun modified, and the adjectival stem. Carstens (2005, 2008) points out that both nouns and nominal modifiers agree in class, number, and person through noun prefixes in Bantu languages. Table 7 summarizes the morphological structure of the igiHa adjective.

Table 7: The morphological structure of igiHa adjectives

CL	Noun	Adjective	Example	Gloss
1-mu-	u- mu -ami	(u)- mu -iiza	umwami (u)mwiiza	'a good king'
2-ba-	a- ba -ami	(u)- ba -iiza	abami (a)beeza	'good kings'
3-mu-	u- mu -sora	(u)- mu -nini	umupira (u)munini	'a big ball'
4-mi-	i- mi -sora	(i)- mi -nini	imipira (i)minini	'big balls'
5-ri-	i- ri -so	(i)- ri -tooyi	idyiso (i)ritooyi	'a small eye'
6-ma-	a- ma -so	(a)- ma -tooyi	amaso (a)matooyi	'small eyes'
7-ki-	i- ki -toke	(i)- ki -shaasha	igitoke (i)gishaasha	'a new banana'
8-bi-	i- bi -toke	(i)- bi -shaasha	ibitoke (i)bishaasha	'new bananas'
9-N-	i- N -zu	(i)- N -sore	inzu (i)nsore	'a good house'
10-N-	i- N -zu	(i)- N -sore	inzu (i)nsore	'good houses'
11-ru-	u- ru -toke	(u)- ru -nini	urutoke (u)runini	'a big finger'
12-ka-	a- ka -koko	(a)- ka -tooyi	agakoko (a)gatooyi	'a small hen'
13-tu-	u- tu -koko	(u)- tu -tooyi	udutoke (u)dutooyi	'small fingers'
14-bu-	u- bu -enke	(u)- bu -enshi	ubwenke (u)bwenshi	'a lot of knowledge'
15-ku-	u- ku -boko	(u)- gu -sore	ukuboko (u)gusore	'a good hand'
16-ha-	a- ha -ntu	(a)- ha -sore	ahantu (a)hasore	'a good place'
17-ku-	-	(a)- ha -nini	- (a)hasore	'a good place'
18-mu-	-	(a)- ha -nini	- (a)hasore	'a good place'
23-i-	-	(a)- ha -nini	- (a)hasore	'a good place'

In the table above, the pre-prefix occurs in parentheses, which means that it is not a compulsory inflectional morpheme of the adjective as a modifier of an overt head noun. It may become an

obligatory morpheme of the adjective, when an adjective occurs a DP dominating an NP headed by a phonologically empty category, the *pro*-form, as will be discussed later in this chapter.

5.2.3 The Syntactic distribution of the *igiHa* adjective

Depending on the syntactic position of the adjective, the *igiHa* adjective can be used either attributively or predicatively. Syntactically, it occurs attributively when it cannot be paraphrased with a copular construction. Attributive adjectives take an optional inflectional pre-prefix when they occur with a nominal head, while predicative adjectives do not. In this regard, I assume like Mpofu (2009), that adjectives in *igiHa* have a predicative function when they are marked with a copular verb form **ni** verb ‘to be’, similarly to Shona, as demonstrated in the following example:

- (3) Umupira wuno ni **mubi**
 u - mu-pira u - no ni mu-bi
 Ppfx-3-ball DETrt-MEDIAL COP Agr3-bad
 ‘This ball is bad.’

The predicative adjective **mubi** ‘bad’ follows the verb **ni** ‘be’ in (3). However, for the reason that these deverbal adjectives occur in the clausal domain, the discussion of predicative adjectives will not be included simply because the current study focuses on modifiers within the nominal domain, i.e. Determiner Phrase (DP) domain.

Being a head-initial language, the canonical syntactic position for attributive adjectives in *igiHa* is the post-nominal position, i.e. after their lexical head nouns. When the adjective occupies this canonical syntactic position, it optionally takes in its inflection the Determiner pre-prefix, as demonstrated in (4a). However, in some discourse contexts, the adjective can occur before the lexical head noun. In this case, the pre-nominal adjective takes an obligatory Determiner pre-prefix in its inflection, as illustrated in (4b). When an adjective occurs before the lexical head noun, the adjective is usually followed by a prosodic pause before the lexical head noun.

- (4) a. **Umukoobwa (u)mukuru** arareba **abaana (a)batooyi**.
 u-mu-koobwa (u) -mu-kuru a - ra - reb - a a -ba-aana (a) - ba-tooyi
 Ppfx-1-girl (Ppfx)-3-great AgrS-PRES-look-FV Ppfx-2-child (Ppfx)-2-small
 Lit: The great girl looks after small children.
 ‘The eldest daughter looks after young children.’
- b. **Umusinzi, umwaana** ntaagenda kwishure.
 u - mu-sinzi u - mu-aana ntaa-gend-a ku - i - shure.
 Ppfx-1-naughty Ppfx-1-child NEG-go-FV INF- 23LOC-school
 ‘The naughty, child does not go to school.’

A DP can contain more than one adjective that modifies the same head noun (referent) in igiHa. However, this sequence of adjectives occurs in the post-nominal position. In this structure, only the first adjective in the cluster can take an optional pre-prefix as exemplified in (5a), where (5b) is ungrammatical and unacceptable.

- (5) a. Ndakunda abakobwa **(a)bagufi banini birabura.**
 n - ra - kund-a a - ba-kobwa ba-gufi ba - nini ba-irabura
 1SG-PRES-love-FV Ppfx-2-girl Agr2-short Agr2-fat Agr2-black
 ‘I love short fat black girls.’
- b. *Ikiraato **(i)chirabura (i)kireshe (i)kiri n”ikiraaka** kiratabuse.
 i - ki-raato i-ki-irabura i - ki-reshe i - ki-ri na i - ki-raaka ki - ra - tabuk-e
 Ppfx-7-shoe Ppfx-7-black Ppfx-7-long Ppfx-7-be ASS-Ppfx-7-patch AgrS-PRES-torn-PERF
 ‘The black long patchy shoe is torn.’

In addition to that, the adjective can co-occur with other modifiers in the same DP. If a lexical head noun, in addition to an adjectival modifier, includes other modifiers in the post-nominal position, the adjective is flexible in terms of the position it takes with respect to the other modifying categories. In this regard, any modifier which occurs immediately adjacent to the lexical head noun takes an optional pre-prefix. Other modifiers in the cluster occur without a pre-prefix in their inflectional morphology. The examples in (6a-c) illustrate this state of affairs.

- (6) a. Ndakunda abakobwa **(a)banje babiri baya bagufi bakunda kuza aha.**
 n - ra - kund-a a -ba-kobwa a - ba- a - nje ba-biri Ø - ba - ya ba-gufi
 1SG-PRES-love-FV Ppfx-2-girl Ppfx-2-POSS-me 2-two DEMrt-2-DISTAL 2-short
 ba - kund-a ku - z - a ø - a - ha
 AgrS-like-FV INF-come-FV PROX-DEMrt-16
 ‘I like my two short girls those who like to come here.’
- b. Ndakunda abakobwa **(a)banje bagufi baya babiri bakunda kuza aha.**
 n - ra - kund-a a -ba-kobwa (a) - ba - a -nje ba-gufi ø - ba- ya ba-biri
 1SG-PRES-love-FV Ppfx-2-girl (Ppfx)-2-GEN-me 2-short DEMrt-2-DIST 2-two
 ba - kund-a ku - z - a ø - a - ha.
 AgrS-like-FV INF-come-FV PROX- DEMrt-16
 ‘I like (specifically) my two short girls those who like to come here.’
- c. Ndakunda abakobwa **(a)bagufi banje bakunda kuza aha baya babiri.**
 n - ra- kund-a a - ba-kobwa a- ba-gufi ba - a - nje ba - kund-a ku - z - a ø - a - ha
 1SG-PRES-love-FV Ppfx-2-girl Ppfx-Agr2-short Agr2-POSS-1SG AgrS-like-FV INF-come-FV PROX-DEMrt-16
 Ø- ba - ya ba-biri
 DEMrt-2-DIST Agr2-two
 ‘I like my two short girls those who like to come here.’

The adjective **bagufi** ‘short’ modifying the object noun **abakobwa** ‘girls’ in (6a) follows the other three modifiers i.e., the possessive **banje** ‘my’, the numeral **babiri** ‘two’, and the distal demonstrative **baya** ‘those’, and it is followed by the relative clause **bakundá kuza aha** ‘who like to come here’. In the construction (6b), the adjective follows the possessive and is followed by the distal demonstrative, the numeral, and the relative clause. The adjective in (6c) appears last in the sequence, following the other nominal modifiers.

5.2.4 The adjective in a DP without a lexical head noun

The igiHa adjective can occur in a DP where the overt lexical head noun it would modify is absent. This is common in situations where the referent is considered to be familiar to all discourse participants. In the discourse-pragmatic context of this DP, the speaker may not necessarily repeat the lexical noun that is assumed to be familiar, instead, s/he may use an adjective modifier(s) that refer(s) to the particular referent. It should be noted that the phonologically empty *pro* head contains the *phi* features (person, number, gender) of the lexical noun. Therefore, the *pro* head bears number and agreement features that are identical to that of the noun modifiers with the obligatory pre-prefix:

- (7) Speaker A: Ngobongo yaaguze ibitebe bisa nte?
 Ngobongo a - a - gur - e i - bi-tebe bi-sa nte?
 1. name AgrS-PAST-buy-PERF Ppfx-8-chair 8-color Q.which
 ‘Ngobongo bought chairs with which color?’

Speaker B: Yaaguze **ivyirabura**.
 a - a - gur - e i - bi-irabura
 AgrS-PAST-buy-PERF Ppfx-8-black
 ‘He bought the black ones.’

In (7), Speaker B employs an attributive adjective **ivyirabura** ‘black ones’ represented in a DP dominating an NP with a *pro* head, and this adjective occurs with an obligatory Determiner pre-prefix. It modifies a phonologically empty *pro* head, which refers to **ibitebe** ‘chairs’ which has already been mentioned in the discourse by speaker A. In syntactic contexts where the head noun is not overtly indicated, i.e., in *pro* constructions, the adjective occurs with an obligatory determiner, the pre-prefix.

I posit that igiHa permits the co-occurrence of more than one adjective in the same DP containing a *pro* head. In this context, only the first adjective realizes an obligatory Determiner

pre-prefix in its inflection while the Determiner pre-prefix may not appear in the inflectional morphology of the other adjectives:

(8) Speaker A: Daawe hayaboha urusengo.

Daawe ha - ya - boh - a u -ru-sengo
1a.father AgrS-PRES-truss-FV Ppfx-11-net
'The father is trussing the/a net.'

Speaker B: Hayaboha urusengo rurinte?

Ø - ha - ya - boh - a u -ru-sengo ru-ri-nte
1a-AgrS-PRES-truss-FV Ppfx-11-net 11-COP-Q.how
'He is trussing the/a net of which kind?'

Speaker A: Hayaboha **ugwirabura runini rutavye.**

Ø - ha - ya - boh-a u -ru-irabura ru-nini ru-tavye
1.a-AgrS-PRES-truss-FV Ppfx-11-black 11-big 11-wide
Lit: He is trussing the black big wide one.
'He is trussing specifically the black one, big and wide.'

In the examples provided, the *pro* head occurs with three adjectives. Among those, the adjective that immediately follows the lexical head noun is the only one that exhibits Determiner pre-prefix.

I posit that the *igiHa* Determiner pre-prefix must occur obligatorily with any nominal category if such nominal category is not preceded by another nominal element. Bearing in mind that *igiHa* is a head-initial language, the adjective canonically occurs in the post-nominal position where it occurs without the Determiner pre-prefix. However, the post-nominal adjective can or cannot take a Determiner pre-prefix, as exemplified in (9a-b). Therefore, the (non-) occurrence of the determiner pre-prefix in the inflectional morphology of the adjective is essentially context-dependent.

(9) a. Umuhiigi arahiiga **igikooko ikinini.**

u- mu-hiigi a - ra - hiig-a i - ki-kooko i - ki-nini
Ppfx-1-hunter 1.3SG-PRES -hiig-FV Ppfx-9-animal Ppfx-9-big
'A/the hunter hunts specifically a/the big animal.'

b. Umuhiigi arahiiga **igikooko kinini.**

u - mu-hiigi a - ra - hiig-a i - ki-kooko ki-nini
Ppfx-1-hunter 1.3SG-PRES-hunt-FV Ppfx-9-animal 9-big
'A/the hunter hunts a/the big animal.'

Example (9a) demonstrates the presence of the Determiner pre-prefix in the adjectival inflection. Since the adjective is inherently neutral with respect to the semantic features of (in)definiteness and (non)specificity, the occurrence of the Determiner pre-prefix encodes a specificity reading.

On the other hand, the adjective in (9b) occurs without the Determiner pre-prefix. The absence of the determiner pre-prefix in this example entails that in the discourse context of the sentence the speaker may have assumed that the hearer has no specific entity in mind. It also indicates that even the speaker in (9b) does not have a specific distinguishable animal in mind that s/he wants to communicate about. The absence of the pre-prefix on the inflectional morphology of the adjective **kinini** ‘big’ in (9b) is therefore associated with the semantic feature of non-specificity. Consequently, the DP in (9a) is interpreted as possessing the semantic features of [-definite, +specific], while the DP **igikoko kinini** ‘big animal’ is interpreted with the semantic features of [-definiteness, -specificity]. Unlike the semantic feature of specificity, the occurrence of Determiner pre-prefix in the inflection morphology of the adjective does not automatically entail the DP subject to have the semantic feature of (in)definiteness. For the DP to be unambiguous regarding the feature of (in) definiteness, there must be an appropriate discourse-pragmatic context that conditions the interpretation of the feature [+/-definite]. The following context in (10) provides the appropriate context for the referent in (9a).

- (10) Speaker A: Umuhiigi arahiiga igikooko changanante?
 u- mu-hiigi a - ra - hiig-a i - ki-kooko ki-angana-nte
 Ppfx-1-hunter 1.3SG-PRES -hiig-FV Ppfx-7-animal 7-size - Q.which
 ‘Which size of an animal the hunter hunts?’

Speaker B: Umuhiigi arahiiga **igikooko ikinini**.
 u- mu-hiigi a - ra - hiig-a i - ki-kooko i - ki-nini
 Ppfx-1-hunter 1.3SG-PRES -hiig-FV Ppfx-9-animal Ppfx-9-big
 ‘A/the hunter hunts specifically the big animal.’

The DP **igikooko ikinini** ‘the specific big animal’ in the utterance responded by Speaker B in (10) relates to the question posed by Speaker A, i.e., **igikooko changanante** ‘which size of an animal’. In this regard, the discourse surrounding the conversation in (10) entails that the DP subject has the semantic feature of definiteness, based on the familiarity factor. The referent subject, i.e., **igikoko** ‘animal’ has already been introduced in the previous utterance by Speaker A. In addition, the given context licenses the adjective **ikinini** ‘the specific big’ to relate its Determiner pre-prefix associated with the semantic feature of specificity, to the information structural feature of contrastive focus. The contrastive focus entails that there is more than one animal implicitly known by the discourse participants. Therefore, a specific referent should be selected from other implicit alternative referents. The following conversation supplements the

suitable context that contributes to the occurrence of the Determiner pre-prefix on the inflection of the adjective:

- (11) Speaker A: Umugore aroosiga **umusora munini** mukigengeri.
 u- mu-gore a - roo - sig-a i - mu-sora mu -nini mu - ki-gengeri.
 Ppfx-1-wife AgrS-FUT-put-FV Ppfx-3-pumpkin Agr3-big LOC18-7-container
 ‘The wife will put a big pumpkin in the container.’

Speaker B: Uwo musora uvuga n’uwahe?
 u - u - o mu-sora u - vug-a ni u - a - he
 DEMrt-3-MEDIAL 3-pumpkin AgrS-talk-FV Cop Agr-GEN-which
 Lit: That pumpkin you are talking about is which?
 ‘Which pumpkin you are referring to?’

Speaker A: Jewe mvuga **umusora umunini**.
 Jewe n - vug -a u - mu-sora u - mu-nini
 1SG AgrS-talk-FV Ppfx-3-pumpkin Ppfx-3-big
 Lit: Me, I am talking the big pumpkin in specific.
 ‘I am referring specifically to the big pumpkin.’

In the first utterance of Speaker A in (11) above, the adjective **munini** ‘big’ occurs without a determiner pre-prefix. In this utterance, Speaker A informs Speaker B that the wife has put a big pumpkin in the container. However, Speaker B did not identify which specific big pumpkin Speaker A is talking about. This entails that there is more than one big pumpkin present in the discourse context, which are implicitly known by the interlocutors, hence that Speaker A in the first utterance is talking about any big pumpkin among them. Depending on the discourse context of Speaker A and Speaker B, the DP **umusora munini** ‘big pumpkin’ in the first sentence of Speaker A encodes two possible readings. First, the DP in the subject is interpreted as being definite but non-specific if mutually Speaker A and Speaker B are aware that there exists at least one big pumpkin among other small pumpkins in the container, about which both interlocutors know, such that the hearer can identify it. Second, Speaker A does not assume that Speaker B is familiar with the big pumpkin. Since the discourse context of the first utterance of Speaker A does not provide any indication that the speaker has a particular identifiable big pumpkin in mind. The DP **umusora munini** ‘big pumpkin’ in the first utterance of Speaker A in (11) is interpreted as having the semantic features of [-definite, -specific], i.e., ‘any big pumpkin’.

Given these assumptions, Speaker B in the following utterance, wants to know which big pumpkin specifically is Speaker A referring to. To particularize the pumpkin, Speaker A, in the second utterance, uses the Determiner pre-prefix in the inflectional morphology of the adjective **munini** ‘big’, hence the DP **umusora umunini** ‘the specifically big pumpkin’. The occurrence of the Determiner pre-prefix encodes that Speaker A now assumes that Speaker B has a specific big pumpkin in mind. This familiarity depends on the appropriate discourse-pragmatic context established by the prior (common ground) knowledge shared by the discourse participants, or whether the referent is co-referenced to an antecedent identifiable in the preceding discourse.

With the adjective that occurs with a phonetically empty lexical head noun i.e., *pro* head, the agreement morphology of the adjective exhibits the phi (person, number, gender) features of the *pro* head noun. This is commonly used in situations when the speaker and hearer have a common knowledge of the referent, as exemplified in (12) below.

- (12) Speaker A: Daawe araguze uburiri (u)bwanganante?
 Daawe a - ra - gur-e u -bu-riri u - bu-angana-nte
 1a.father AgrS-PRES-buy-PERF Ppfx-14-bed Ppfx-14-size-how
 Lit: Father has bought the/a bed of which size.’
 ‘Which size of bed has my father bought?’

Speaker B: Araguze **ubugarí**.
 a - ra - gur - e u - bu-gari
 2SG-PRES-buy-PERF Ppfx-14-wide
 ‘He has bought specifically the wide [already mentioned bed]’

In the representation of the utterance of Speaker B above, the adjective occurs with a *pro* head DP. In this regard, Speaker B is aware that Speaker A has the specific referent ‘bed’ in mind because s/he has already mentioned it in the previous utterance. As has been demonstrated in example (12), the adjective occurring in the *pro* head DP takes an obligatory Determiner pre-prefix. The pre-prefix in this context bears both definite and specificity interpretations, thus denoting a [+definite] and [+specific] DP. The following example in (13) gives a context for the definite interpretation of the DP containing the adjective, assuming prior mention of the referent.

- (13) Nyokorume aguze imipira yibiri. Nzanira **uwirabura**.
 1a.uncle a - gur-e i- mi-pira i-biri. N - zan - ir - a u - u-irabura
 uncle AgrS-buy-PERF Ppfx-4-ball 4-two 1SG-bring-APPL-FV Ppfx-3-black
 ‘The maternal uncle has bought two balls. Bring me [**specifically**] **the black one.**’

The first utterance presupposes the presence of two balls. In the following utterance, the hearer is familiar with the existence of two balls of different colors. In this discourse context, the one provided in the first part of the utterance constitutes a suitable way for the hearer to express a definite interpretation of the given entity. In the third utterance, the hearer is in a position to identify the referent because its familiarity has already been established in the previous discourse. In this regard, the DP is interpreted as both definite and specific.

The occurrence of the Determiner pre-prefix in the inflectional morphology of the adjective in the representation of the second utterance of Speaker A in (11) and Speaker B in (12) can further be associated with the information structural notion of ‘contrastive focus’ (cf. Aboh et al. 2010; Lambrecht 1996; Repp 2009, 2014, 2016). Hence, the DP **umusora umunini** ‘the specific big pumpkin’ in the second utterance of Speaker A in (11), and **uwirabura** ‘specifically the black one’ in (13) are, in addition, interpreted as having a contrastive focus, which is encoded by the presence of the Determiner pre-prefix in the inflection of the adjective. Recall that the view of the focus meaning adopted here is the focus of alternatives. In this regard, the referents intended to be communicated in those DPs are specifically the ones with such qualities and no other possible ones which may be present in their contexts. Regarding this postulation, I contend that the occurrence of the Determiner pre-prefix in the inflectional morphology of the adjective encodes a pragmatic reading of locating a specific referent or set of objects, that are selected from other possible objects. Krifka (2008) postulates, contrastive focus induces a ‘suitable subset of the contextually or situationally given elements for which the predicate phrase can potentially hold’. The contrast evoked by the occurrence of the Determiner pre-prefix in the inflectional morphology of the adjective draws the attention of the hearer to pick out the specific entity from other alternatives in the discourse which may be mentioned overtly or covertly (see Repp’s, 2016 views on implicit and explicit alternatives). The use of the pre-prefix points to a referent that is the most prominent one in the context.

The presence of the obligatory Determiner pre-prefix in the inflection of the adjective that occurs with a phonologically empty *pro* head realizes a referent as having contrastive focus, along the lines of Aboh (2004) that information structural notions of the topic and focus are represented in the left periphery of nominal phrases. I argue that in this syntactic structure where the adjective occurs with a *pro* head, the Determiner pre-prefix encodes an anaphoric reading, analogous to

the demonstrative. The same property is attested with other nominal modifiers, such as the genitive in possessive phrases, clausal relatives, and numerals when they take a compulsory Determiner pre-prefix in DP constructions with a *pro* head.

In this regard, I propose that there is convincing evidence that the obligatory occurrence of the Determiner pre-prefix with the agreement morpheme occurring immediately left of the modifier) in the adjectivally modified nominal in *igiHa* can be posited to be a category Determiner (D), which is specified for the feature [+Specific] and/or [+Definite]. In this chapter, I postulate that the canonical position of the adjective in *igiHa* is after the lexical head noun, i.e., post-nominal. The adjective canonically occurs without a Determiner pre-prefix and the lexical head noun retains its pre-prefix. However, I argue in this study that, under certain discourse-pragmatic conditions, an adjective in the post-nominal can take an optional pre-prefix that triggers feature [+specific] and [+definite]. I argue that the addition of an optional pre-prefix, which is regarded as a category D in this study encodes a reading of additional emphasis to the referent that realizes a contrastive focus interpretation. Example (14) below demonstrates the discourse that evokes the occurrence of pre-prefix on both the lexical head noun and the adjectival modifier:

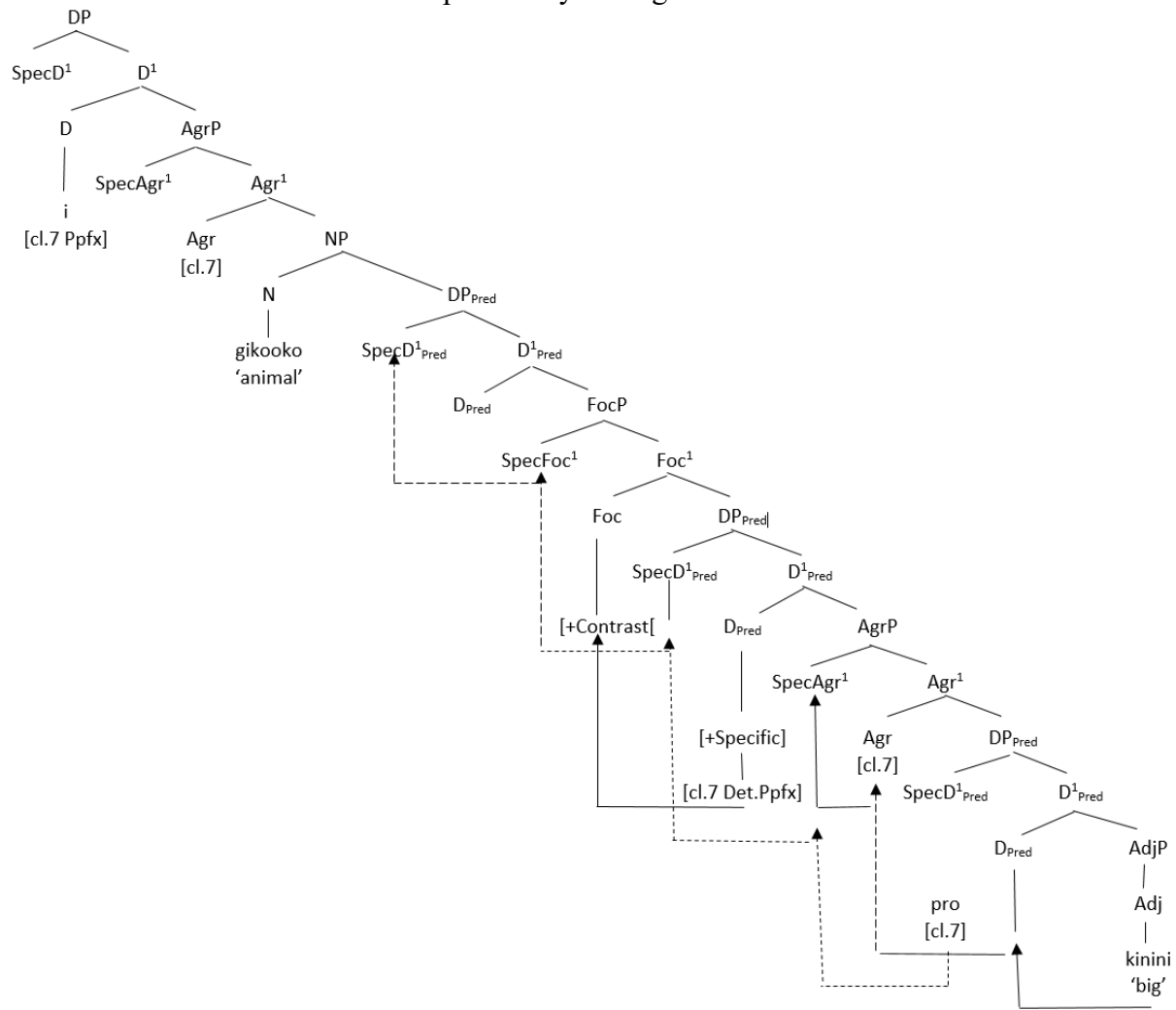
- (14) Speaker A: Umwaana hayabona igitebe changanante?
 u- mu-aana ha - ya - boon-a i - ki-tebe ki-angana-nte
 Ppfx-1-child PROG-AgrS-see-FV Ppfx-7-chair 7-size - Q.which
 ‘Which size of an animal the hunter hunts?’

Speaker B: Umuhiigi arahiiga **igikooko ikinini**.
 u- mu-aana ha - ya - boon-a i - ki-tebe ki-angana-nte
 Ppfx-1-child PROG-AgrS-see-FV Ppfx-7-chair 7-size - Q.which
 ‘A/the hunter hunts specifically the big animal.’

In the representation of the utterance uttered by Speaker B, the nominal domain **igikooko ikinini** ‘the specific big animal’ contains two determiners, one in the inflectional morphology of the lexical head noun, and another on the adjectival inflection morphology stem. Regarding the context where the adjective modifier occurs with the Determiner pre-prefix, I argue, along the lines of proposals by Panagiotidis and Marinis (2011) that the DP containing the modifier bearing a definite article in Modern Greek, is a DP headed by the predicate (D_{Pred}). In this regard, I contend that the *igiHa* Determiner pre-prefix occurring optionally or obligatorily in the inflection of the adjective in (11), (12), (13), and (14) above can, if realized, be specified as a D_{Pred} , i.e., a Determiner that heads a DP predicate projection in terms of the proposals of

Panagiotidis and Marinis (2011). The Determiner pre-prefix in the inflection of nominal modifiers in igiHa, as an article-less language, like other Bantu languages generally, is then a morpheme that is posited as a functional category Determiner, D_{Pred} , i.e., the non-article analogous category to the definite article in Modern Greek that Panagiotidis and Marinis (ibid.) posit as D_{Pred} , heading a DP predicate. This pre-prefix Determiner is specified for the feature [+Specific, +contrastive focus], although in some instances (where the head is phonetically empty, *pro*) it is also definite. The interpretative features of the DP constituent in the utterance outlined in (14) can structurally be represented as follows:

- (15) The Phrase Structure for DP object [igikooko ikinini] in igiHa sentence:
 Umuhiiga arahiiga **igikooko ikinini**.
 ‘A/the hunter hunts specifically the big animal.’



In line with the view advanced by Mursell (2016), that the relation between a (contrastively) focused constituent and its focus head is represented as a spec-head agreement relation, I posit that the focused constituent [**ikinini**] ‘the specific big’ in the Phrase Structure above moves successive cyclically to the SpecFoc¹ position, where it then occurs in a Specifier-head relation with the Focus head, a relation similar to the relation of the clausal Spec-head agreement. Thus, the relation between the focused constituent and the Focus head is viewed as being a Focus agreement relation in the DP.

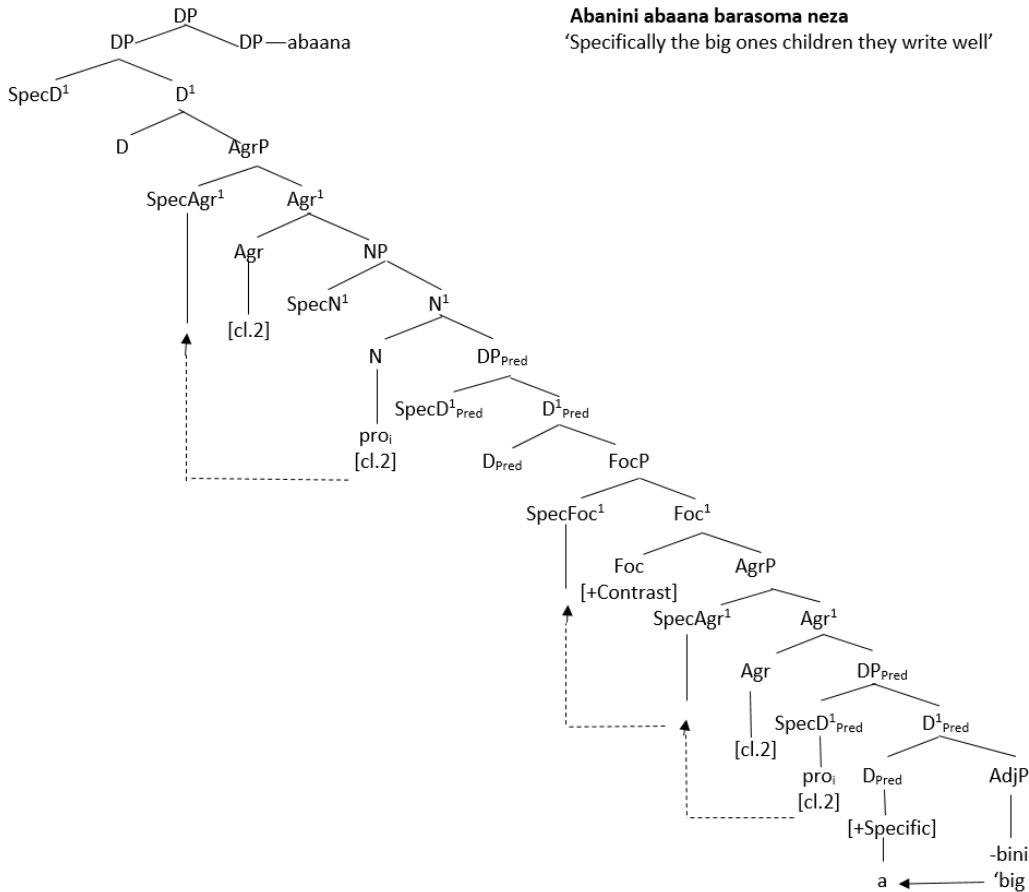
Concerning the discourse context, where an adjective precedes a lexical head noun the determiner pre-prefix occurs obligatorily in the inflectional morphology of the adjective. In this context, the pre-prefix appearing in the adjectival inflection introduces a specificity and contrastive focus interpretation to the DP. Thus, the pre-prefix of the lexical head noun heads a DP, and the adjective occurs in an NP headed by a *pro*, which is dominated by D_{Pred} as illustrated in the following example.

- (16) Speaker A: Abaana abaahe basoma neza?
 a - ba-aana a - ba-he ba-som-a
 Ppfx-2-child Ppfx-2-Q.which kind AgrS-read-FV
 ‘Which kind of children read well?’

Speaker B: **Abanini, abaana** barasoma neza.
 a - ba-aana, a -ba-aana ba - ra - som - a neza
 Ppfx-2-child Ppfx-2-child AgrS-PRES-read- FV well
 ‘Specifically the big children read well.’

In the example in (16), Speaker B responds to a question from Speaker A who intends to know the particular attributive features of the children who read well. In the response to this question of Speaker A, uncanonically, the adjective occurs before the lexical head noun. When the adjective precedes the lexical head noun it takes a compulsory Determiner pre-prefix that encodes an additional reading of specificity which interacts with a contrastive focus reading. Considering its interpretative properties, the structural representation of the DP constituent in (16) above is as follows:

- (17) The phrase structure of the DP [**abanini, abaana**] in igiHa sentence:
Abanini, abaana barasoma neza.
 ‘Specifically the big children read well.’



In the diagram (17) above, the feature of specificity is specified in the D_{Pred} Phrase in the left periphery of the Adjective Phrase. When the adjective occurs in the pre-nominal position, it encodes the feature of definiteness due to the familiarity factor. In this regard, the referent realizes an extra feature of emphasis generated in the FocP dominated by the Determiner pre-prefix.

5.2.5 The co-occurrence of the adjective and other modifiers

5.2.5.1 The adjective with the demonstrative

In natural conversation, the speaker may decide to assist the hearer to identify the referent by including the demonstrative in an adjectivally modified nominal phrase. Since the *igiHa* demonstrative is argued in this study to have intrinsic features of definiteness and specificity, its semantic-pragmatic denotations help the hearer to locate the referent in the nominal domain. In this regard, the occurrence of the demonstrative results in the DP expression being interpreted as

definite and specific. It is definite because the hearer can identify the intended referent in terms of the identifiability principle proposed by Lyons (1999).

Given the discussion regarding the demonstrative being specified for the [+definite +specific] features, the goal of this section is to examine the interpretations the head noun encodes because of the (non-)occurrence of the pre-prefix with the adjective and/or the head noun in the nominal phrase that contains a demonstrative. When an adjective co-occurs with a demonstrative in a DP nominal expressions, three basic word orders can be attested in igiHa. They both can co-occur in the post-nominal or both in the pre-nominal position. In addition, the demonstrative may occur before the head lexical noun and the adjective after the lexical head noun. Furthermore, when both an adjective and a demonstrative occur in the same position, before or after the lexical head noun, they are flexible to either precede or follow, the other.

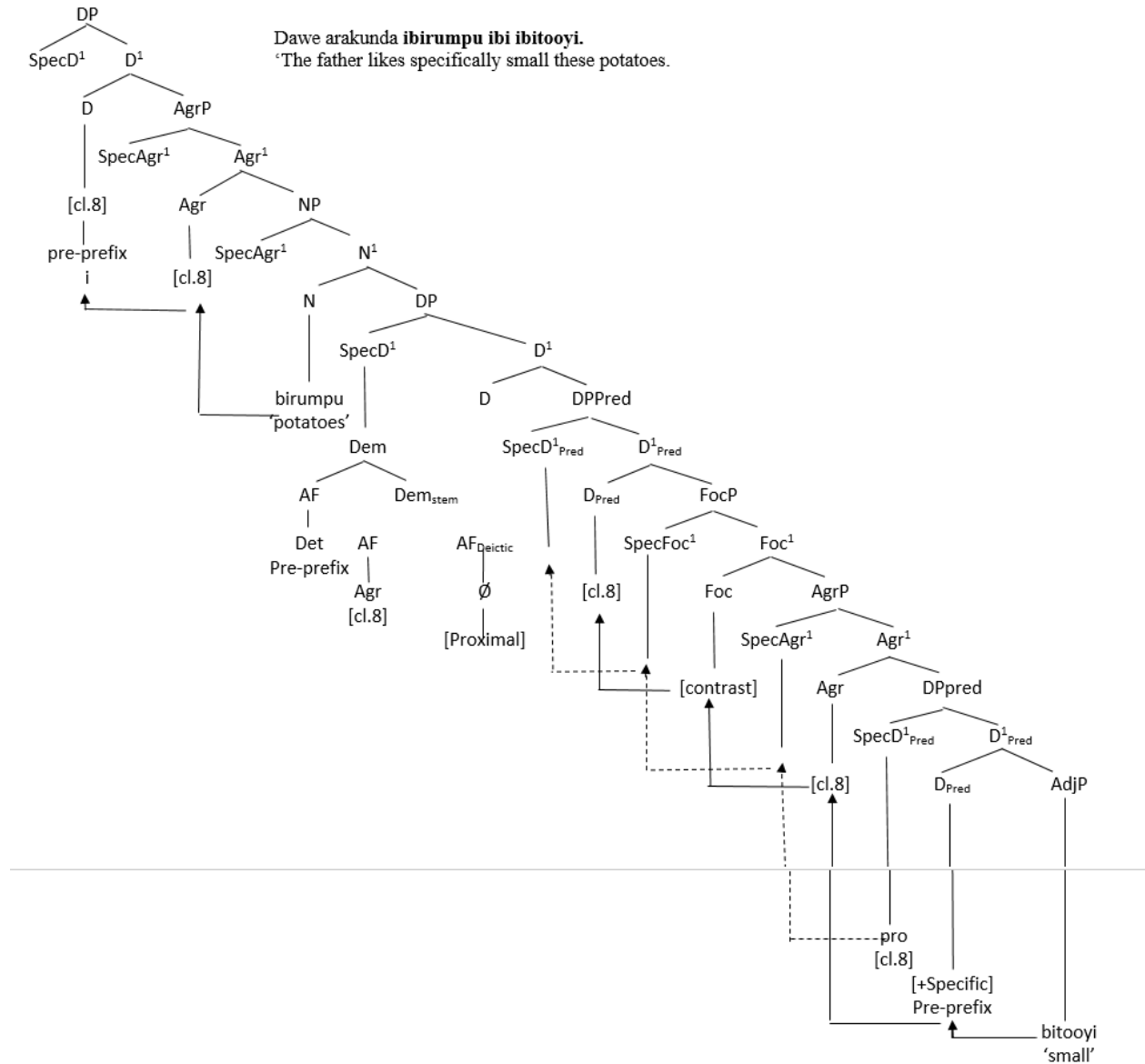
When the demonstrative precedes an adjective in the post-nominal position, the lexical head retains its pre-prefix obligatorily while the adjective must obligatorily occur without a determiner pre-prefix (18a). By contrast, when an adjective precedes a demonstrative in the post-nominal position, the pre-prefix of the lexical head noun is retained compulsorily, while the determiner pre-prefix of an adjective occurs optionally (18b). Similarly, when the demonstrative precedes an adjective in the position before the lexical head noun, the adjective must obligatorily occur without a determiner pre-prefix, while the pre-prefix of the lexical head noun optionally remains as in (18c). When an adjective precedes a demonstrative in the pre-nominally, the adjectival pre-prefix appears compulsorily and the adjective is followed by a prosodic pause, and the lexical head noun takes an optional pre-prefix, as in (18d). The lexical head noun takes an optional pre-prefix and the adjectival determiner pre-prefix is obligatorily absent when the demonstrative occurs in the pre-nominal position and an adjective in the post-nominal position, as in (18e). The DP in which the adjective occurs in pre-nominal position and the demonstrative in post-nominal position is considered ungrammatical and unacceptable in igiHa.

- (18) a. Dawe arakunda **ibirumpu ibi bitooyi**.
 1a.father a - ra - kund-a i - bi-rumpu i - bi- Ø bi-tooyi
 Father AgrS-PRES-like-FV Ppfx-8-potatoe DEMrt-8-PROX 8-small
 ‘The father likes these big potatoes.’

- b. Dawe arakunda ibirumpu **ibi (i)bitooyi**.
 1a.father a - ra - kund-a i - bi-rumpu bi-tooyi i - bi - Ø
 Father AgrS-PRES-like-FV Ppfx-8-potatoe 8-small DEMrt-8-PROX
 ‘The father likes (specifically) these small potatoes.’
- c. Dawe arakunda **ibi binini (i)birumpu**.
 1a.father a - ra - kund-a i - bi Ø i - bi-rumpu (i) - bi-nini
 Father AgrS-PRES-like-FV DEMrt-8-PROX Ppfx-8-potatoe (Ppfx)-8-big
 ‘The father likes these big (specifically) potatoes.’
- d. Dawe arakunda **ibinini, ibi (i)birumpu**
 1a.father a - ra - kund-a i -bi-nini i - bi-rumpu i - bi- Ø
 Father AgrS-PRES-like-FV Ppfx-8-big Ppfx-8-potatoe DEMrt-8-PROX
 ‘The father likes specifically the big ones, these (particular) potatoes.’
- e. Dawe arakunda **ibi (i)birumpu binini**.
 1a.father a - ra - kund-a i - bi- Ø i - bi-rumpu bi-nini
 Father AgrS-PRES-like-FV DEMrt-8-PROX Ppfx-8-potatoe 8-big
 ‘The father likes these big (specifically) potatoes.’

The examples presented above (18a-e) illustrate different positions occupied by the adjective and the demonstrative in the positions before and after the lexical head noun. Given that the presence of the demonstrative realizes in a nominal phrase the [+definite] and [+specific] features, the Determiner pre-prefix in the inflection of the adjective (**(i)binini** ‘the big one’ and/or on the lexical head noun (**(i)birumpu** ‘potatoes’ in (18b-e) encodes the additional pragmatic reading of contrasting the intended referent with any other referents which are not selected in the discourse. Thus, the utterance in (18b-e) has the interpretation that particular identifiable referents are among other possible contextually identifiable referents. The occurrence of the optional pre-prefixes in (18b-e) further encodes the interaction of the specificity feature with a feature of contrastive focus in the Focus Phrase. The interdependence between the specificity and focus features is therefore considered to be encoded by a morphological affix, the Determiner pre-prefix. Taking into accounts its interpretative properties, the structural representation of the DP constituent in (18b) above is as follows:

- (19) The Phrase Structure for DP object [ibirumpu ibi ibitooyi] in igiHa sentence:
 Dawe arakunda **ibirumpu ibi ibitooyi**.
 ‘The father likes (specifically) these small potatoes.’



In the tree diagram in (19) above, the restrictive interpretation of the adjective is represented, defined for Modern Greek by Panagiotidis and Marinis (2011) as a sub-set denoted by the Determiner pre-prefix constituent from an explicit lexical head. This DP predication reading is closely related to the contrastive focus interpretation in terms of the notion of implicit alternative of Repp (2016). In terms of this DP predication interpretation, the complement category occurs as the predicate of the pro subject, and/or lexical subject, occurring in the SpecDP_{pred} in the structural representation.

5.3 The Numeral

Numerals, like adjectives, may occur as nominal modifiers of a lexical or phonologically empty pro head in the nominal domain. For the purpose of this section, simple numerals 1-9 that directly modify nouns are examined. Like other nominal modifiers, such as adjectives, the igiHa numerals are neutral in semantic features of (in)definiteness and (non-)specificity. In contrast to adjectives, the igiHa numerals are quantificational, as a result, they are impermissible with mass and abstract nouns.

5.3.1 The morpho-syntactic structure of DPs with the numeral modifier

The numerals 1-6 are inflected exhibiting the agreement prefix corresponding to the modified lexical head noun phi features (of person, number, and gender) or the phonologically empty pro head. This sub-section considers only the morphological structure of simple numerals (1-9) of igiHa for the purposes of examining (in)definiteness and (non-)specificity properties resulting from the presence of a numeral nominal modifier. The structure of numerals above 9 in igiHa is complex, and it gets more complicated with higher numerals. The structural complexity of words used for numerals above 9 have a different structural analysis. Consider table 8:

Table 8: Morphological structure of cardinal numeral (1-6) modifiers

NC	Example	Noun class agreement structure					
		1	2	3	4	5	6
1 -mu-	o-mu-gore ‘wife’	u-mwe	-	-	-	-	-
2 -ba-	a-ba-gore ‘wives’	-	ba-biri	ba-tatu	ba-ne	ba-taanu	ba-tandatu
3 -mu-	o-mu-bu ‘mosquito’	u-mwe	-	-	-	-	-
4 -mi-	i-mi-bu ‘mosquitos’	-	i-biri	i-tatu	i-ne	i-taanu	i-tandatu
5 -ri-/-i-	i-ri-iso ‘eye’	ri-mwe	-	-	-	-	-
6 -ma-	a-ma-iso ‘eyes’	-	a-biri	a-tatu	a-ne	a-taanu	a-tandatu
7 -ki-	i-ki-rago ‘mat’	ki-mwe	-	-	-	-	-
8 -bi-	i-bi-rago ‘mats’	-	bi-biri	bi-tatu	bi-ne	bi-taan-	bi-tandatu
9 -n-	i-n-zoka ‘snake’	e-mwe	-	-	-	-	-
10 -n-	i-n-zoka ‘snakes’	-	zi-biri	zi-tatu	zi-ne	zi-taanu	zi-tandatu
11 -ru-	u-ru-kwi ‘wood’	ru-mwe	-	-	-	-	-
12 -ka-	a-ka-tare ‘small lion’	ka-mwe	-	-	-	-	-
13 -tu-	o-tu-tare ‘small lions’	-	tu-biri	tu-tatu	tu-ne	tu-taanu	tu-tandatu
14 -bu-	o-bu-aato ‘canoe’	-	bu-biri	bu-tatu	bu-ne	bu-taanu	bu-tandatu
15 -ku-	o-ku-boko ‘arm’	ku-mwe	-	-	-	-	-
16 -ha-	a-ha-ntu ‘place’	ha-mwe	ha-biri	ha-tatu	ha-ne	ha-taanu	ha-tandatu
17 -ku-	-	-	-	-	-	-	-
18 -mu-	-	-	-	-	-	-	-

The numerals (1-9) analyzed for igiHa in this section, are divided into two categories, based on their morphological distinctiveness, namely, 1-6, and 7-9. Numerals from 1-6 exhibit the morphological structure of the agreement prefix homophonous with the noun class prefix of the modified lexical head noun, as in (20a-c). In contrast, the numerals from 7-9 do not take an agreement prefix (20d-f). However, words for numerals 7-9 can also function as semantic heads in the DP similarly to the words for numerals 1-6. Thus, the words for the numerals 7-9 do not permit the occurrence of a pre-prefix, a property the numerals 1-6 have. Furthermore, like nouns, numerals can co-occur with other nominal modifiers, such as another numeral or a quantifier.

- (20) a. Nyoko waawe arang'wa **igikombe kimwe** kira mu gitondo.
 Nyoko u- a - we a - ra - ng'u- a i - ki-kombe ki-mwe
 1a.mother 1-GEN-2PL AgrS-PRES-drink-FV Ppfx-8-cup 7- one
 buri mu ki-tondo
 every LOC18 7-morning
 'Your mother drinks one cup every morning.'
- b. Nyoko waawe arang'wa **ibikombe bitatu** kira mu gitondo.
 Nyoko u - a - we a - ra - ng'u- a i - bi-kombe bi-tatu
 1a.mother 1-GEN-we AgrS-PRES-drink-FV Ppfx-8-cup 8-three
 buri mu ki-tondo
 every LOC18 7-morning
 'Your mother drinks three cups every morning.'
- c. Nyoko waawe arang'wa **ibikombe bitandatu** kira mu gitondo.
 Nyoko u- a - we a - ra - ng'u- a i - bi-kombe bi-tandatu
 1a.mother Agr1-GEN-2PL AgrS-PRES-drink-FV Ppfx-8-cup 7-six
 buri mu ki-tondo
 every LOC18-7-morning
 'Your mother drinks six cups every morning.'
- d. Nyoko waawe arang'wa **ibikombe ndwi** kira mu gitondo.
 Nyoko u- a - we a - ra - ng'u- a i - bi-kombe ndwi
 1a. mother Agr1-GEN-2PL AgrS-PRES-drink-FV Ppfx-8-cup seven
 buri mu ki-tondo
 every LOC18-7-morning
 'Your mother drinks seven cups every morning.'
- e. Nyoko waawe arang'wa **ibikombe munane** kira mugitondo.
 Nyoko u- a - we a - ra - ng'u- a i - bi-kombe munane
 1a.mother Agr1-GEN-2PL AgrS-PRES-drink-FV Ppfx-8-cup eight
 buri mu ki-tondo
 every LOC18 7-morning
 'Your mother drinks eight cups every morning.'

f. Nyoko wawe arang'wa ibikombe **chenda** kira mugitondo.

Nyoko u- a - we a - ra - ng'u- a i- bi-kombe ndwi
 1a.mother Agr1-GEN-2PL AgrS-PRES-drink-FV Ppfx-8-cup nine
 buri mu ki-tondo
 every LOC18 7-morning
 'Your mother drinks nine cups every morning.'

All words for cardinal numerals discussed above in this section can be derived into words for expressing ordinal numerals. This derivation is realized by using the noun agreement prefix and the genitive element **a-**. IgiHa has two special forms for the ordinal numerals equivalent to the English words 'first' and 'last' which do not require the association with this genitive morpheme. The ordinal **-tangura** represents 'first', while **-heruka** is used for the ordinal numeral denoting 'last'. These two forms are special because the igiHa speakers (more specifically the young generation) tend to use the words **-anza** and **-mwisho** for **-tangura** and **-heruka**, respectively. However, the stems **-anza** and **-mwisho** are loanwords from Kiswahili, and compulsorily take a genitive element **-a** when used as words for expressing ordinal numerals. The stems **-tangura** and **-heruka** are derived from the verb **tangura** 'start/begin' and **heruka** 'finish'.

Like other nominal modifiers, the common position in which the numeral occurs in the igiHa DP nominal expression is after the lexical head noun. Words for the cardinal numerals 1-6 exhibit a noun agreement prefix like other nominal modifiers, as exemplified in (21a-c), while those from 7-9 do not realize such concordial agreement, as exemplified in (21d-f):

(21) a. Yaaguze igitebe **(i)kimwe**.
 a - a - gur - e i - ki-tebe (i)-ki-mwe
 AgrS-PAST-buy-PERF Ppfx-7-book (Ppfx)-7-one
 'S/he bought one chair.'

b. Yaaguze ibitebe **(i)bibiri**.
 a - a - gur - e i - bi-tebe (i) - bi - biri
 AgrS-PAST-buy-PERF Ppfx-8-book (Ppfx)-8-two
 'S/he bought two chairs.'

c. Yaaguze ibitebe **(i)bitandatu**.
 a - a - gur - e i - bi-tebe (i) - bi-ne
 AgrS-PAST-buy-PERF Ppfx-8-book Ppfx-8-six
 'S/he bought six chairs only.'

d. Yaaguze ibitebe **(i)ndwi**.
 a - a - gur - e i - bi-tebe (i) - Ø - ndwi
 AgrS-PAST-buy-PERF Ppfx-8-book (Ppfx)-8-seven
 'S/he bought seven chairs.'

e. Yaaguze ibitebe **(i)munane**

a - a - gur - e i - bi-tebe (i) - Ø-munane
 AgrS-PAST-buy-PERF Ppfx-8-book (Ppfx)-8-eight
 ‘S/he bought eight chairs.’

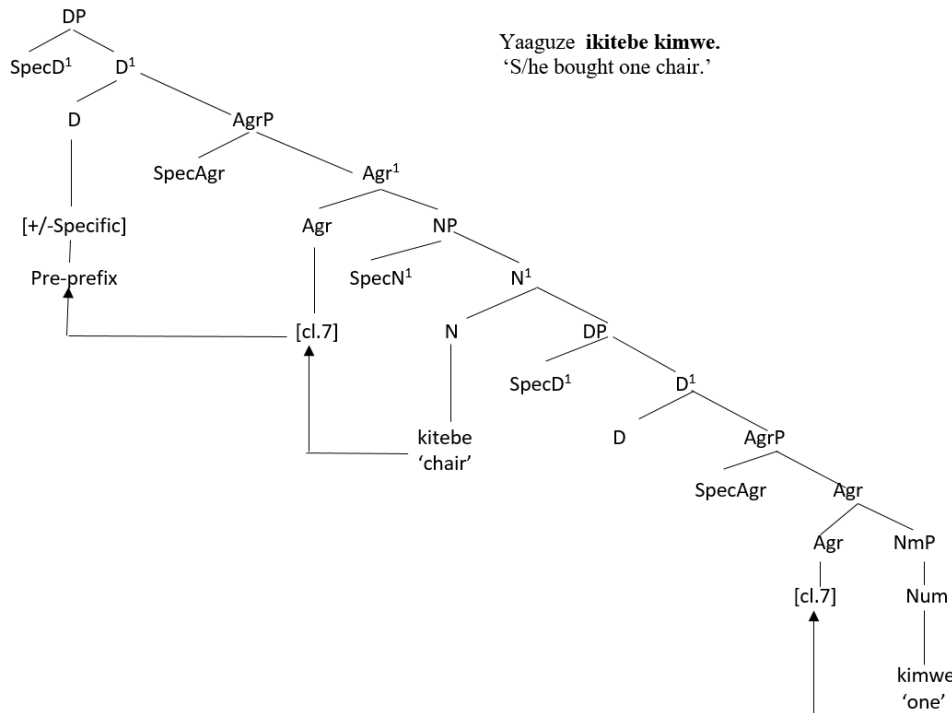
f. Yaaguze ibitebe **(i)chenda.**

a - a - gur - e i - bi-tebe (i) - Ø-chenda
 AgrS-PAST-buy-PERF Ppfx-8-book (Ppfx)-8-nine
 ‘S/he bought nine chairs.’

Regarding the possible discourse-pragmatic interpretations, the *igiHa* DP containing a numeral modifier is considered to be neutral regarding the semantic the features of (in)definiteness and (non-)specificity. I postulate that the *igiHa* numeral modifier possesses an inherently neutral feature with respect to (in)definiteness and (non-)specificity. Thus, the semantic interpretation of the DP containing the numeral that appears without its Determiner pre-prefix is interpreted as having a semantic feature of [+/-definite, +/-specificity]. Considering such interpretative features of the DP containing the numeral that appears without the Determiner pre-prefix in example (21a), the general structure of such DP can be represented as follows:

(22) Yaaguze **igitebe kimwe.**

‘S/he bought one chair’



Similarly, adjectives, the semantic feature of definiteness for the DP containing a numeral reflects discourse-pragmatic factors. For example, the utterance of Speaker B in (23) below illustrates that the numeral can occur in the post-nominal position and have an obligatory Determiner pre-prefix, associated with a prosodic pause before the lexical head noun. In this study, I posit that nominal modifiers that occur uncanonically in the pre-nominal position are assumed to modify referents that are familiar to the interlocutors. In this regard, the referents **inka** ‘cows’ in (23) are interpreted with the semantic feature of definite due to the discourse-pragmatic familiarity factor. The referents have already been introduced in the preceding utterance by Speaker A where s/he enquires the number of cows needed by the father. Since the referents are now familiar to the interlocutors in the discourse context, a speaker B introduces focus on the new information **izibiri** ‘specifically two’, followed by the prosodic pause that indicates that the lexical head is familiar and is mentioned just as aftermath thought. Regarding the pragmatic interpretations of the occurrence of the Determiner pre-prefix, the referent expressed in such a nominal expression realizes emphasis i.e. focus, to the referent which is argued in this study to interact with the discourse-pragmatic features of specificity and contrastive focus. The following conversation provides an example of how this interpretation is realized in this context:

- (23) Speaker A: Daawe agomba inka zingahe?
 Daawe a - gomb-a i - n-ka zi-ngahe
 1a.father AgrS-want-FV Ppfx-10-cow 10-Q.how many
 Lit: The father wants cows how many
 ‘The father wants how many cows?’

Speaker B: Agomba **izibiri, inka**.
 a - gomb - a i - zi-biri i - n-ka
 3SG-want-PRES Ppfx-10-two Ppfx-10-cow
 ‘He wants specifically two, cow.’

The occurrence of the numeral in the pre-nominal position is relatively uncanonical, but commonly used in natural conversations. In the example provided in (23), the numeral takes an obligatory Determiner pre-prefix, and it is followed by a prosodic pause which encodes specificity and contrastive focus features which are postulated in this study to be associated with the left peripheral position of the DP containing a Numeral Phrase.

As is the case with other nominal modifiers with neutral semantic features concerning (in)definiteness and (non-)specificity, cardinal numerals can occur without a full explicit lexical head noun, i.e. have a *pro* head. In this context, numerals take an obligatory Determiner pre-prefix, as exemplified in (24):

- (24) Speaker A: Abaana baawe baagiye he?
 a - ba-aana ba- a - we ba - a - gend-e he
 Ppfx-2-child 3-GEN-2SG AgrS-PAST-go-PERF Q. where
 ‘Where did your children go?’

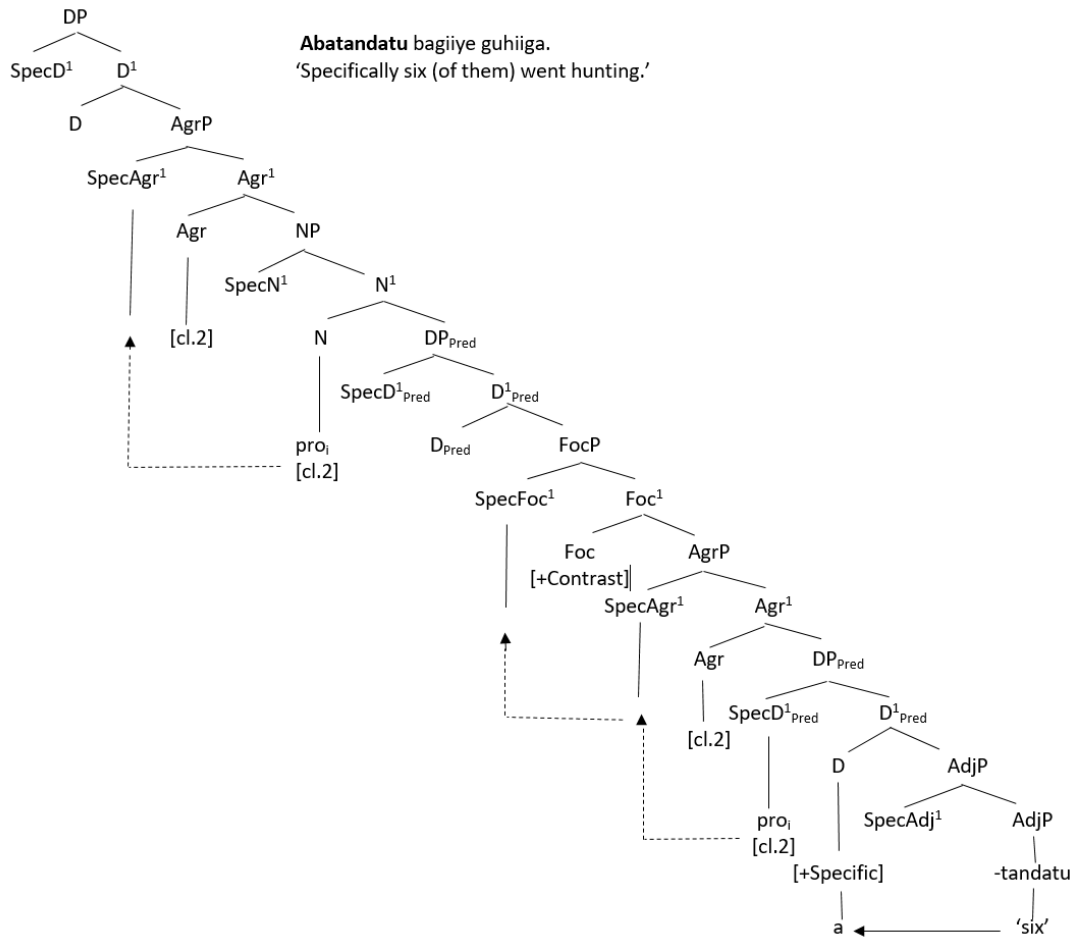
Speaker B: **Abatandatu** baagiye guhiiga, **abane** bararoongowe.
 a - ba-tandatu ba -a-gend-e ku -hiig-a, a -ba-ne ba - a - roongor-w - e
 Ppfx-2-six AgrS-PAST-go-PERF INF-hunt-FV Ppfx-2-four AgrS-PAST-marry-PASS-PERF
 ‘Specifically, six of them went hunting, specifically three of them got married.’

The utterances in this context were obtained from a natural conversation. The example (24) above illustrates that Speaker B used the numerals **abatandatu** ‘specifically the six ones’ and **abane** ‘specifically the four ones’ to refer to the number of referents **abaana** ‘children that were already introduced in the preceding discourse.

Similarly to other nominal modifiers with a neutral feature regarding (in)definiteness and (non-)specificity, I argue that the Determiner pre-prefix that occurs in the inflectional morphology of the numeral modifier is also posited as a functional category D_{Pred} . Thus, I identify the Determiner pre-prefix occurring optionally or obligatorily with numeral nominal modifiers in $igiHa$, if realized, as a functional category D_{Pred} . For example, when a lexical head is absent, hence an empty head *pro* occurs, the Determiner pre-prefix is mandatory, as illustrated in (24), and the semantic interpretation of such DP is [+definite, +specific]. In other environments where the numeral, for example, precedes the lexical head, the pre-prefix is also obligatory, as illustrated in (23). However, where the numeral follows the lexical head, the pre-prefix is optional, as in (21a-f), and if used, it introduces a specificity and contrastive focus reading to that DP. Thus, the lexical noun heads the NP, and the numeral modifier occurs in the NP dominated by a DP Predication projection. I thus posit that the Determiner pre-prefix occurring in the inflectional morphology of the numeral, as a Determiner, D_{Pred} , introducing a DP Predicate, DP_{pred} . In the case of the DP containing an NP with a *pro* head, the restrictive interpretation results from the reading of a sub-set denoted by the Determiner pre-prefix encoding the denotation of a sub-set from the salient set denoted by the lexical head noun. Taking into account

these interpretative features of the DP containing a *pro* head in (24) above, its structural representation is as follows:

- (25) The Phrase Structure of the subject DP [abatandatu] in igiHa sentence:
Abatandatu baagiye guhiiga.
 ‘Specifically six (of them) went hunting.’



In the discourse context associated with the example (24), the structural representation of the DP containing a *pro* head in (25) above indicates that the numeral modifier has an anaphoric reading in the sense that it is familiar to the speaker and the hearer. Therefore, the DP subject encodes the feature of definiteness invoking the principle of familiarity. In addition, the numeral in the subject obligatorily exhibits the Determiner pre-prefix that encodes the features of specificity and contrastive focus. In this regard, the igiHa DP in the tree diagram of (25) above represents the interpretation of the discourse-pragmatic features of [+definite, +specific, +contrastive focus].

5.3.2 The co-occurrence of the numeral with other nominal modifiers

5.3.2.1 The co-occurrence of the numeral with the adjective

The canonical syntactic position for a numeral and an adjective modifier that co-occur in a DP is after the lexical head noun, i.e. post-nominally. When the numeral co-occurs with the adjective in the *igiHa* DP, the word order is variable. In this regard, neither the adjective nor the numeral has a rigid position relative to each other in *igiHa*. However, it is common that the numeral occurs before the adjective. When the adjective precedes the numeral, it immediately is followed with a prosodic pause before the numeral as exemplified below:

- (26) a. Umogoragore aguze **impuuzu (i)zibiri zirabura**
 u - mu-goragore a - gur - e i - n - puuzu (i) - zi-biri zi-rabura.
 Ppfx-1-woman AgrS-buy-PERF Ppfx-9/10-puuzu (Ppfx)-10-two 10-black
 ‘The woman has bought (specifically) two black clothes.’
- b. Umogoragore aguze **impuuzu (i)zirabura, zibiri.**
 u - mu-goragore a - gur - e i - n - puuzu (i) - zi-rabura zi-biri
 Ppfx-1-woman AgrS-buy-PERF Ppfx-9/10-puuzu (Ppfx)-10-black 10-two
 ‘The woman has bought (specifically) two black clothes.’

I argued that numerals and adjectives are inherently neutral with respect to (in)definiteness and (non-)specificity. Therefore, the co-occurrence of the numeral with the adjective has no significant effect on the semantic interpretation of the particular DP representing a nominal expression. However, in the examples provided in (26), certain discourse-pragmatic factors obtain, where the modifier immediate adjacent to the lexical head noun can realize an optional Determiner pre-prefix. The occurrence of the Determiner pre-prefix encodes the reading that the referent is specific, but not definite.

However, when the two modifiers occur without a lexical head noun, the nominal expression is interpreted as definite through familiarity, but also specific, which is triggered by the obligatory Determiner pre-prefix, as in the following example:

- (27) Speaker A: Umogoragore aguze **impuuzu zingahe zisante?**
 u - mu-goragore a - gur - e i - n - puuzu zi-ngahe zi - sa - nte
 Ppfx-1-woman AgrS-buy-PERF Ppfx-9/10-cloth 10-Q.how many 10-color-Q.how
 The/a woman has bought how many clothes of which color?
 ‘How many and what color of the cloth the woman has bought?’

- Speaker B: Umogoragore aguze **izibiri zirabura.**
 u - mu-goragore a - gur - e i - zi-biri zi-rabura
 Ppfx-1-woman AgrS-PRES-buy-PERF Ppfx-10-two 10-black

‘The woman has bought the known specifically black (one).’

In the utterance spoken by Speaker A, the numeral and the adjective co-occur without an explicit lexical head noun. The reference of the lexical head noun **impuuzu** ‘clothes’ has already been established by Speaker A in the preceding sentence. Therefore, it is assumed that both the Speakers (A and B) in (27) have a common ground understanding of the referent. In this regard, the nominal expression **izibiri zirabura** ‘specifically the two black ones’ encodes the feature of definiteness in terms of the familiarity notion.

In addition, the numeral modifier exhibits an obligatory Determiner pre-prefix in the DP representing the nominal expression **izibiri zirabura** in (27). The occurrence of the Determiner pre-prefix in the inflectional morphology of the numeral co-occurring in the nominal expression without an overt lexical head noun is associated with specificity, which interacts with a reading of contrastive focus. In this discourse context, the referents are interpreted as being specifically two out of many other implicitly assumed possible black referents which may be salient in the discourse context (see discussion of Repp's 2016 implicit alternatives).

5.3.2.2 The co-occurrence of the numeral modifier with the relative clause

In the DP representing a nominal expression where the numeral co-occurs with the relative clause, the relative clause commonly follows the numeral, but the opposite order is also stylistically acceptable. The preferred syntactic position in which these modifiers co-occur is after the lexical head noun, i.e. post-nominally. In this regard, the numeral obligatorily occurs without determiner pre-prefix while the relative clause may realize a determiner pre-prefix optionally. The following example illustrates these properties:

- (28) Ibintu **bibiri (i)vyó ukunda** biri ngaha.
 i - bi-ntu Ø-munane (i) - bi-ó u - kund-a bi - ri n - ki -a -ha
 Ppfx-7-liver 8-eight (Ppfx)-8-REL 2SG-like-FV AgrS-Cop LDCop-7-DEMr-16
 ‘The eight things (specifically) which you like are here.’

As will be discussed in section 5.6 of the current study, I posit that relative clauses are intrinsically neutral with regard to the semantic features of (in)definiteness and (non-)specificity. Therefore, the DP nominal domain in (28) may be interpreted as neutral. In addition, the possibility obtains for the DP in (28) to have a definite reading if other pragmatic factors are

considered. For instance, the nominal phrase **ibintu bibiri (i)vyó ukunda** ‘the things which you like’ may be definite if the speaker and the hearer have common knowledge about the particular things to the extent that they can recall those particular things from their memory. It means that there are particularly two things, about which the speaker and the hearer share the knowledge, that the hearer likes. On the other hand, the occurrence of the optional Determiner pre-prefix in the inflectional morphology of the relative clause encodes a specificity reading. The feature of specificity interacts with and is interrelated to the information structural feature of contrastive focus whereby the feature of specificity is encoded in D and the determiner moves to the FocP where it checks for the feature of contrastive focus.

5.3.2.3 The co-occurrence of the numeral modifier with the possessive

The co-occurrence of a numeral modifier with the possessive is commonly found in the post-nominal position. In this combination of co-occurrence, the numeral commonly occurs after the possessive, and any of these modifiers may take an optional Determiner pre-prefix depending on the entity on which the speaker wants to put emphasis, i.e. focus. The following examples illustrate these properties:

- (29) Speaker A: Amahera yi’shure ndayakura hehe?
 a - ma-hera i - a i - Ø-shuri n - ra - kur-a hehe
 Ppfx-6-money 6-GEN Ppfx-5-school 1SG-PRES-get-FV Q.where
 ‘Where do I get the tuition fee?’

Speaker B: Uroodandaza **imirima (i)yaawe (i)ytandatu**
 u - roo -dandaz-a i - mi-rima (i) - i - a - we (i) - i-tandatu
 2SG-FUT-sell - FV Ppfx-4-farm Ppfx-4-GEN-3PL (Ppfx)-4-six
 ‘You will sell (specifically) your (specifically) six farms.’

In example (29), the possessive precedes the numeral and both modifiers may take an optional Determiner pre-prefix. As will be discussed in Chapter Six of this study, I posit that the possessive modifier has an inherently neutral feature regarding (in)definiteness and (non)specificity. In this regard, the DP representing the nominal expression exhibiting the co-occurrence of the numeral and the possessive without a Determiner pre-prefix in the inflectional morphology of any of the two modifiers is construed as neutral in terms of (in)definiteness and (non)specific. However, when any of the two modifiers take an optional Determiner pre-prefix the referent has a specificity feature that encodes the referent to be specific in the particular context. For example, in (29), where the nominal expression occurs as **imirima iyaawe**

yitandatu ‘specifically your six farms’ the reading obtains that Speaker B has in mind specific referents which are different from any other farms which may be available in the context of their conversations. The reading of specificity inter-relates with the reading of contrastive focus, which implies that the referent contrasts with other alternative referents which are assumed to be implicitly available in the discourse context.

However, under the certain discourse-pragmatic condition the nominal expression containing the co-occurrence of the numeral and the possessive may be interpreted definite, especially when this co-occurrence occurs without an overt lexical head noun, i.e., *pro* head. In this context, the possessive, which generally precedes the numeral, realizes an obligatory Determiner pre-prefix. The following conversation illustrates these properties:

- (30) Speaker A: Ugomba kudandaza ibitabo ivyaahe?
 u - gomb-a ku -dandaz-a i - bi-tabo i - bi - a - he
 2SG-want-FV INF- sell- FV Ppfx-8-book Ppfx-8-GEN-Q.which
 ‘Do you want to buy which book?’

Speaker B: Ngomba kudandaza ivyiwanje bibiri.
 N - gomb-a ku-dandaz-a i - bi - a - nje bi-biri
 1SG-want-FV INF-sell-FV Ppfx-8-GEN-1SG 8-two
 ‘I want to sell the two specifically of mine.’

The utterance of Speaker B contains a nominal expression that exemplifies the co-occurrence of a numeral and a possessive that modify a lexical head noun that is phonologically empty. In this regard, the referent **ibitabo** ‘books’ is assumed to be known by both Speaker A and Speaker B, because it has been mentioned in the preceding utterance. In this context, the nominal expression receives a feature of definiteness through the principle of familiarity. Regarding the occurrence of the obligatory Determiner pre-prefix in the inflectional morphology of the possessive modifier in (30) above, the referent receives a feature of specificity because Speaker B has a particular referent in mind. Regarding information structural features, the particular DP expression **ivyiwanje bibiri** ‘the specific two of mine’ encodes a contrastive focus reading, with an implicit alternative interpretation. This means that there may be other alternative books that do not specifically belong to Speaker A but they are known implicitly by the interlocutors in terms of their common ground knowledge.

5.4 Clausal relative nominal modifiers

This section examines the morpho-syntactic structure of clausal relatives in igiHa. It also explores how the (non-)occurrence of the Determiner pre-prefix in the inflectional morphology of the clausal relatives encodes and denotes interpretations of (in)definiteness and (non-)specificity, in conjunction with a contrastive focus reading on the entire DP. Clausal relatives occur as subordinate clauses that modify a lexical head noun within DP nominal domain. They are generally classified into direct and indirect relatives, depending on whether the antecedent is co-referential with the subject of the relative clause or some other argument in a non-subject position. Direct and indirect clausal relatives are alternatively referred to by some scholars as subject and object clausal relatives, respectively. In the current study, the terms direct and indirect clausal relatives will be used to avoid possible confusion with the terms subject and object as grammatical functions in the clause.

5.4.1 Morpho-syntactic structure and properties of the direct and indirect clausal relative

A direct clausal relative is a clause in which the antecedent head noun is co-referential with the subject pronominal of the relative clause. In other words, a subject relative clause is a relative clause in which the subject is co-referential within the relative clause head, i.e. antecedent. The direct clausal relative in igiHa is characterized by a verb agreement prefix of the subject, and the relative tone, which is compulsory. The relative clause tone occurs on the nucleus of the tense syllable. In addition, the igiHa direct clausal relative may take an optional Determiner pre-prefix, similarly to other nominal modifiers. Consider the following examples:

- (31) a. **Abaana (a)bakundá ubwooba** baragiiye mwiporo.
 a - ba-aana (a) - ba-kund-á u - bu-ooba ba - ra-gend-e mu - i -poro
 Ppfx-2-child Ppfx-2-like-FV.REL Ppfx-2-mushroom AgrS-PRES-go-PERF 18LOC-5-forest
 ‘The children (specifically) who like mushrooms have gone to the forest.’
- b. **Umupira (u)wusatusé** sindawugomba.
 u - mu-pira (u) -u-satuk-é sí - n - ra - u-gomb-a
 Ppfx-3-ball (Ppfx)-3-burst-PERF.REL NEG-1SG-PRES-3-want-FV
 ‘The ball (specifically) which is busted I don’t want it.’

The morphology of the indirect clausal relatives in igiHa is different from that of the direct clausal relatives. The major difference is that the indirect clausal relative morpheme in igiHa is a morpho-phonologically independent demonstrative element in the sense that it is not affixed to

the relative clause verb. The indirect relative clause pronominal in *igiHa* is formed by an optional pre-prefix, the agreement prefix of the relative clause head (i.e. antecedent), and the quantifier root **-ó** which bears an obligatory relative high tone. The indirect relative clause pronominal is morphologically similar to the Position 2 (Intermediate) demonstrative but is distinct from the spatial deictic demonstrative in that it has a high tone. Consider the following examples:

- (32) a. Umwaana (**u**)**wó** waatumye kwisoko ntaagaruse.
 u - mu-aana (u) - u - ó u - aa - tum - e ku - i-soko ntaa-garuk-e
 Ppfx-1-child (Ppfx)-1-REL 3-PAST-send-PERF INF-5-market NEG-turn-PERF
 ‘The/a child (specifically) whom you sent to the market has not returned.’
- b. Ndoogura amachungwa (**a**)**yó** ndoobona.
 n - roo - gur - a a-ma-chungwa (a) - i-ó n - roo - bon-a
 1SG-FUT-buy-FV Ppfx-6-orange (Ppfx)-6-REL 1SG-FUTU-see- FV
 ‘I will buy oranges (specifically) which I will see.’

The question that arises here is whether the *igiHa* indirect clausal relative morpheme is inherently associated with the demonstrative. The indirect relative clause pronominal does not encode spatial deictic features but does express anaphoric features with the relative clause head, i.e. antecedent. In addition, the indirect relative clause pronominal seems to exhibit features of (in)definiteness or (non-)specificity. Furthermore, the indirect clausal relative contains a compulsory relative high tone, which is not the case for *igiHa* (spatial) deictic demonstratives. Therefore, I consider in this dissertation, the indirect clausal relative pronominal to be in some respect different from the Position 2 intermediate demonstrative. The following table 5 presents the indirect clausal relative pronominals, corresponding in form to the intermediate (position 2) demonstrative forms.

Table 9: The morphological structure of the igiHa indirect clausal relative pronominal (corresponding in form with the Position 2 (Intermediate Demonstrative))

Noun Class	Indirect relative	clausal	The structure
1 -mu-	uwó		u - u - ó
2 -ba-	ubwó		a - ba - ó
3 -mu-	uwó		u - u - ó
4 -mi-	iyó		i - i - ó
5 -ri-	idyó		i - ri - ó
6 -ma-	ayó		a - i - ó
7 -ki-	ichó		i - ki - ó
8 -bi-	ivyó		i - bi - ó
9 -n-	iyó		i - i - ó
10 -n-	izó		i - zi - ó
11 -ru-	ugwó		u - ru - ó
12 -ka-	ukwó		u - ka - ó
13 -tu-	utwó		u - tu - ó
14 -bu-	ubwó		u - bu - ó
15 -ku-	ukwó		u - ku - ó
16 -ha-	ahó		a - ha - ó
17 -ku-		-	-
18 -mu-		-	-

The structure of the indirect relative clause pronominal, presented in table 5 is similar to the medial demonstrative (position 2) discussed in chapter four of this study. I maintain, along the lines of Visser (2008), that the demonstrative with intrinsic features of definite and specific is related to the direct clausal relative pronominal which lost the deictic semantic feature but retained its anaphoric features, with the introduction of a high tone encoding the emphasis (focus) of the anaphoricity it expresses to the overt (lexical) or non-overt (empty pro) antecedent head of the relative clause.

Regarding the occurrence of the Determiner pre-prefix, the noun class 1 has an exceptional form. Regardless of the tense of the relative clause employed, the clausal relative pronominal does not permit the Determiner pre-prefix when modifying a head (antecedent) in noun class 1, as exemplified below:

(33) a. Umuntu **asomá ibitabo** aramenya amagambo meshi.

u - mu-ntu a-som - á i - bi-tabo a - ra-meny-a a - ma-gambo ma-inshi
 Ppfx-1-person 1-read-PRES.REL Ppfx-8-book AgrS-ra-know-FV Ppfx-6-thing 6-many/much
 ‘The/a man who reads books knows many things.’

b. Umuntu ***(a)asomá ibitabo** aramenya amagambo meshi.

u - mu-ntu (a)- a-som - á i - bi-tabo a - ra-meny-a a - ma-gambo ma-inshi
 Ppfx-1-person (Ppfx) 1-read-PRES.REL Ppfx-8-book AgrS-ra-know-FV Ppfx-6-thing 6-many/much
 ‘The/a man (specifically) who reads books knows many things.’

Regarding the syntactic position, both direct and indirect clausal relatives canonically occur in the post-nominal (antecedent) position (33a). When a clausal relative occurs after the lexical (antecedent) head noun it can realize an optional Determiner pre-prefix. However, under certain pragmatic conditions, the clausal relative can precede its antecedent head noun. In this context, the clausal relative realizes an obligatory determiner pre-prefix and a prosodic pause that precedes the antecedent lexical head noun it modifies, as in (33b). Whichever position the clausal relative occupies, it must, however, realize agreement with its antecedent lexical (or empty) head noun.

(34) a. **Imbeba (i)yiróókwinjira munzu** ndayicha.

i - n - beba i - óó - ku - injir-a mu - n - zu n - ra - ich-a
 Ppfx-9/10-rat 9-FUT.REL-INF-enter-FV 18LOC-9/10-house 1SG-PRES-kill-FV
 ‘I kill the/a rat which will enter the house.’

b. **Iyiróókwinjira munzu, imbeba** ndayicha.

i - i - róó - ku - injir-a mu - n - zu i - n - beba n - ra - ich-a
 Ppfx-9-FUT.REL - INF-enter-FV 18LOC-9/10- house Ppfx-9/10-rat 1SG-PRES-kill-FV
 ‘The rat specifically which will enter the house I will kill it.’

I contend that clausal relatives in igiHa are neutral with respect to definiteness and (non-)specificity. Regardless of the (non-)occurrence of the Determiner pre-prefix, clausal relatives normally express additional descriptive content about the antecedent referent. The Determiner pre-prefix of clausal relatives manifests a interpret property of specificity that yields the reading to the hearer to the referent (relative clause antecedent) as being specific. Regarding this reading, the Determiner pre-prefix thus functions to denote to the hearer that the speaker has something specific in mind. In addition, the Determiner pre-prefix encodes the information structural feature of contrastive focus, giving the reading that the referent **imbeba** ‘rat’ in (34) is specific among other possible implicit referents which are in the same discourse context, with a similar description. Thus, the reading obtains that the implicit alternative rats presumed in the given context do not enter the house. The Determiner pre-prefix occurring optionally or obligatorily in the inflectional morphology of the clausal relative in (34a,) is, if realized, viewed in this dissertation as encoding the features [-definite, +specific, +contrastive focus]. As has been argued earlier in this study, nominal modifiers that occur in the pre-nominal position are assumed to modify the lexical head noun that is familiar to the interlocutors. In this regard, the pre-nominal clausal relative in (34b) encodes the semantic feature of definiteness. The

occurrence of the clausal relative in the pre-nominal position, followed by a prosodic pause encodes the reading that the referent is well known by the interlocutors, hence the lexical head noun occurs as an afterthought. Regarding the occurrence of the obligatory Determiner pre-prefix on the inflection of the clausal relative, the DP in (34b) is viewed as encoding the features of [+definiteness, +specificity, +contrastive focus]. In addition, the DPs in (34) are postulated as sub-sets denoted by the Determiner pre-prefix constituents from the super-set, the explicit lexical head noun **imbeba** ‘rats’. Thus, the occurrence of the Determiner pre-prefix in the inflection of the relative clause nominal modifier is specified as heading a DP predicate (DP_{Pred}) projection (following proposals for Modern Greek by Panagiotidis and Marinis, 2011). This Determiner pre-prefix in the context of (34a) is specified for the feature of [+specificity], and feature [+definiteness, +specificity, +contrastive focus] in the context of (34b).

The clausal relatives may occur with a lexical head which is phonologically null, i.e. *pro*. In this regard, the clausal relative pronominal realizes an obligatory Determiner pre-prefix. Consider the following example conversation.

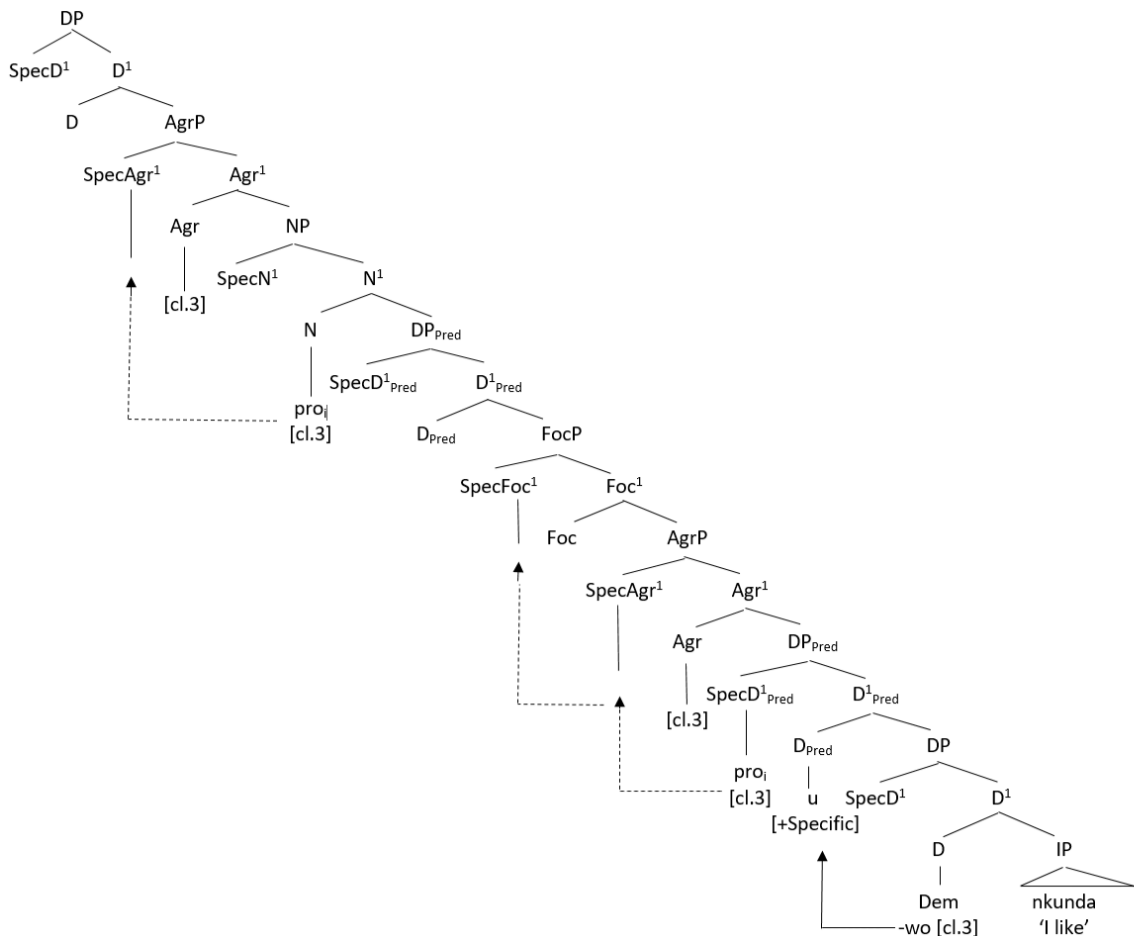
- (35) Speaker A: Urootwaara umupira uwahe?
 u - roo-twaar-a u-mu-pira u - u - a - he
 2SG-FUT-take-FV Ppfx-3-ball Ppfx-3-GEN-Q. which
 ‘Which ball will you take?’

Speaker B: Ndootwaara **uwó nkunda**.
 n - roo-twaar-a u - u - ó n-kund-a
 1SG-FUT-take-FV Ppfx-3-REL 1SG-like.
 ‘The known one specifically which I like.’

In the utterance of Speaker B, the clausal relative **uwó nkunda** ‘which I like’ manifests anaphoric interpretations in the sense that the antecedent referent to which the relative clause (demonstrative) pronominal expresses anaphoric reference, is familiar to the interlocutors (speaker A and hearer B). In this context, the referent encodes a reading of definiteness by the familiarity principle. With regard to the obligatory Determiner pre-prefix in (35), the referent encodes readings of specificity and contrastive focus. The Determiner pre-prefix encodes the specific referent from other implicit alternative balls in the discourse context, which the speaker does not like. In this regard, the DP containing a clausal relative occurring without a lexical head, hence a phonologically empty head *pro*, manifests the features [+definiteness, +specificity,

+contrastive focus]. Similarly, with other nominal modifiers, the DP containing the clausal relative occurring with a *pro* head is viewed to denote a restrictive interpretation that is understood as a sub-set denoted by the Determiner pre-prefix constituent from a salient super-set denoted by the implicit lexical head noun. Therefore, the Determiner pre-prefix in (35) is argued to head a DP predicate projection. In this regard, the DP predication interpretation is expressed in that the complement category is the predicate of the *pro* subject occurring in the SpecDP_{pred}. The interpretative features of the DP constituent representing the utterance by speaker B in (35) above can be represented as follows:

- (36) The Phrase Structure of the DP object [uwo nkunda] as in igiHa sentence:
 Ndootwaara **uwó nkunda**.
 ‘The known one specifically which I like.’



5.4.2 The co-occurrence of the clausal relative with other nominal modifiers

This sub-section examines the co-occurrence of the clausal relative with other nominal modifiers, and the possible word orders of such instances of co-occurrence. Thus, this sub-section examines the co-occurrence of the clausal relative with the adjective, and with the possessive. The co-occurrence of the relatives with the numeral is discussed and illustrated in section 5.5.1 of this chapter.

5.4.2.1 The co-occurrence of casual relatives with the adjective

The syntactic position in which a co-occurring clausal relative and adjective appear is after the lexical head noun, i.e. post-nominally. The data analyzed in this section do not show the possibility of this co-occurrence in the pre-nominal position. When the clausal relative co-occurs with the adjective in the post-nominal position, the preferred word orders are usually variable. However, infrequent instances, the adjective is likely to occur before the relative clause. The order in which space the clausal relative precedes the adjective is considered as a stylistic variation. In this co-occurrence, any of the modifiers can take an optional Determiner pre-prefix depending on what entity the speaker intends to be emphasized, i.e. put in focus. Consider the following examples:

- (37) a. Umupira **(u)wirabura (u)wó waaguze ejo** ni mwiiza.
 u-mu-pira (u) - u-irabura (u) - u - ó u - aa - gur - e ejo ni mu-iiza
 Ppfx-3-ball (Ppfx)-3-black (Ppfx)-3-REL 2SG-PAST-buy-PERF yesterday Cop 3-nice
 ‘The (specific) black ball (specific) which you bought yesterday is nice.’
- b. Umupira **(u)wo waguze ejo, (u)wirabura** ni mwiiza
 u-mu-pira (u) - u - ó u - aa - gur - e ejo (u) - u-irabura ni mu-iiza
 Ppfx-3-ball (Ppfx)-3-REL 2SG-PAST-buy-PERF yesterday (Ppfx)-3-black Cop 3-nice
 ‘The (specific) black ball (specific) which you bought yesterday is nice.’

As has been argued earlier in this chapter, both the adjective and the clausal relative bear an inherently neutral feature with regard to (in)definiteness and (non-)specificity. Thus, the co-occurrence as such of the clausal relative and the adjective in the *igiHa* DP is unrelated to (in)definiteness and (non-)specificity. Hence the DP containing these modifiers remains neutral. However, like other nominal modifiers with an inherently neutral feature, the occurrence of the Determiner pre-prefix in the inflectional morphology of one or any two modifiers introduces a feature of specificity. When the speaker’s utterance exhibits the Determiner pre-prefix, it implies

that s/he has a particular referent in his mind. Thus, the occurrence of the optional Determiner pre-prefix in the inflectional morphology of the modifiers in (37a-b) ‘ball’ encodes the features [-definite +specific] to the referent **umupira**. In addition, the *igiHa* Determiner pre-prefix is argued to inherently bear the information structural feature of contrastive focus. In this regard, the DP in the subject (37) is interpreted as encoding the feature of [+contrastive focus] in the sense that the referent is selected from other alternative referents that may be in the discourse context, encoded by the Determiner pre-prefix in the morphology of the adjective or relative clause pronominal conferential with the relative clause head (antecedent). In the discourse context of the DP in example (37) the interpretation may obtain that there are other implicit sets of balls that are either not black, or which were not bought yesterday. Therefore, the speaker is referring to the specific ball which is either specifically black or specifically the one that was bought yesterday. In addition, the occurrence of the Determiner pre-prefix in the inflection of either of the nominal modifiers in (37a-b) is associated with an interpretation of DP predication along the lines of Panagiotidis and Marinis (2011).

5.4.2.2 The co-occurrence of the clausal relative with the possessive

In this sub-section, I posit that the co-occurrence of the clausal relative and the possessive modifier also bears an inherent neutral feature regarding the semantic features of (in)definiteness and (non-)specificity. Regarding the syntactic position, the co-occurrence of the clausal relative and the possessive modifier tends to appear after the lexical head noun, i.e. post-nominally. In this regard, the possessive modifier normally occurs before the clausal relative although the clausal relative may also precede the possessive form stylistically. As is the case with the co-occurrence of the clausal relative with other modifiers, both the possessive form and the clausal relative may exhibit an optional determiner pre-prefix, as exemplified below:

- (38) a. Ukuguru **(u)kwaanje (u)kwó waavunyé ejo** kurakize.
 u - ku-guru (u) - ku - a -nje (u) - ku- ó u - aa -vunik-e ejo
 Ppfx-15-leg (Ppfx)-15-GEN-me (Ppfx)-15-REL 1SG-PAST-break-PERF yesterday
 ku - ra - kir - e
 AgrS-PRES- heal-PERF
 ‘(Specifically) my leg (specifically) which you broke yesterday has healed.’

- b. Ukuguru **(u)kwó waavunyé ejo, (u)kwaanje** kurakize.
 u - ku-guru (u) - ku- ó u - aa -vunik-e ejo (u) - ku - a -nje
 Ppfx-15-leg (Ppfx)-15-REL 1SG-PAST-break-PERF yesterday (Ppfx)-15-GEN-me

ku - ra -kir - e
 AgrS-PRES-heal-PERF
 ‘(Specifically) my leg (specifically) which broke yesterday has healed.’

The DP nominal expression containing the clausal relative and the possessive modifiers is essentially neutral concerning (in)definiteness and (non-)specificity. Therefore, in the absence of the Determiner pre-prefix, the referent **ukuguru** ‘leg’ is interpreted as neutral concerning the reading of definiteness and specificity. However, like with other modifiers with an inherently neutral feature, the occurrence of the Determiner pre-prefix in the inflectional morphology of the clausal relative or the possessive modifier, (38) encodes both specificity and contrastive focus features. The contrastive focus encoded in (38) is related to the implicit alternative set, following proposals by Repp (2016) in the sense that the determiner pre-prefix encodes identification of the referent **ukuguru** ‘leg’ from another possible alternative leg that was not specifically of the speaker, or was not specifically broke yesterday. Like in the case of other nominal modifiers discussed in this chapter, namely the adjective and the numeral, the Determiner pre-prefix occurring optionally in the inflection of either of the nominal modifiers co-occurring in one DP in (38) above is also posited as a Determiner predicate (D_{pred}) head, introducing a DP Predicate of the lexical head noun **ukuguru** ‘leg’.

5.5 The possessive

This section is devoted to examining the morpho-syntax of DP constructions with a possessive nominal modifier. In addition, it examines the discourse-pragmatic interpretations associated with its morphological structure and its syntactic distribution within the DP. For this purpose, the (non-)occurrence of the Determiner pre-prefix in the inflection morphology of the possessive modifier is examined. Its (non-)occurrence with the possessive is interpreted concerning the semantic features of (in)definiteness and (non-)specificity, the information structural feature of contrastive focus, and the DP predication interpretation.

5.5.1 The morpho-syntactic structure of the possessive

The igiHa possessive form, like in many other Bantu languages, realizes the agreement prefix of the preceding genitive head with the genitive morpheme **-a**. In some scholarly studies, the genitive morpheme is referred to as a connective, an associative marker, or a connector (cf.

Harjula, 2004; Petzell, 2008). The genitive morpheme **-a** connects two nominal elements, one denoting the possession nominal and another representing the complement possessor noun. In this regard, the agreement prefix is prefixed to the genitive morpheme **-a** in the environments where the possessor is a lexical noun (39a). On the other hand, the genitive morpheme is part of the inflection of the pronoun where the possessor is a pronoun in the sense that the possessive pronoun merges with the agreement prefix (39b). It should be noted that when the possessor is a lexical noun which is not a personal noun, in *igiHa*, it requires that the genitive **-a** merge with the pre-prefix of the complement possessor noun.

(39) a. **Abatuunzi (a)b'ingurube** baradandaza inyama.

a - ba-tuunzi (a) - ba-a i - n -gurube ba - ra-dandaz- a i - Ø - nyama
ppfx-2-herder (Ppfx)-2-GEN Ppfx-9/10 - pig AgrS-PRES-sell-FV Ppfx-9/10-meat
'Herders (specifically) of pigs sell meat'

b. **Amahera (a)yaabo** yarataagise.

a - ma-hera (a) - ya - a - bo ya - ra -taagis-e
Ppfx-6-money (Ppfx)-6-GEN-them AgrS-PRES-lost-PERF
'(Specifically) their money has lost.'

The surface form of the possessive construction in (39a) is **abatuunzi (a)b'ingurube**. It exhibits the connector genitive morpheme and the complement possessor noun using an apostrophe as a result of the affinity between morphology and phonology given the underlying structure is **abatuunzi (a)ba ingurube**. In the following example in (39b), the genitive morpheme is affixed to the possessive pronoun **yaabo** 'theirs'. Table 10 summarizes the morphological structure of the possessive pronoun:

Table 10: Morphological structure of the possessive pronoun

Noun class	Lexical head noun	Possessive pronoun	Structure of the possessive pronoun	Gloss
1 -mu-	umugore	(u)waanje	(u-)u-a-nje	'my wife'
2 -ba-	abagabo	(a)baachu	(a-)ba-a-chu	'our husbands'
3 -mu-	umugozi	(u)waawe	(o-)u-a-we	'your rope'
4 -mi-	imigozi	(i)yaanyu	(i-)i-a-nyu	'your ropes'
5 -ri/i-	idyiso	(i)dyaanje	(i-)ri-a-nje	'my eye'
6 -ma-	amaboko	(a)yaabu	(a-)i-a-bu	'their hands'
7 -ki-	ikimori	(i)chaanje	(i-)ki-a-nje	'my torch'
8 -bi-	ibimori	(i)vyaawe	(i-)bi-a-we	'your torches'
9 -n-	inzamba	(i)yaachu	(i-)i-a-chu	'our trumpet'
10 -n-	inzamba	(i)zaanyu	(i-)zi-a-nyu	'your trumpets'
11 -ru-	urukundo	(u)gwaawe	(u-)ru-a-we	'your love'
12 -ka-	agachuraguzo	(a)kaawe	(a-)ka-a-we	'your small hummer'
13 -tu-	uduchuraguzo	(u)twaachu	(u-)tu-a-chu	'our small hummers'
14 -bu-	ubunewe	(u)bwanje	(u-)bu-a-nje	'my laziness'
15 -ku-	ugutwi	(o)kwaawe	(u-)ku-a-we	'your ear'
16 -ha-	ahantu	(a)haawe	(a-)ha-a-we	'at your place'
17 -ku-	-	-	-	-
18 -mu-	-	-	-	-
23 -i-	-	-	-	-

Table (10) above presents the possessive pronouns that are formed by the optional determiner pre-prefix, the agreement prefix, and the possessive stem. Possessive pronouns in noun classes 17-23 are not realized. The possessive pronoun for locative class 26 extends to other locative classes. The root of the possessive pronoun reflects personal pronouns singular and plural, as the following Table 11 illustrates:

Table 11: Personal possessive pronoun forms

	Singular		Plural	
	structure	possessive stem	structure	possessive stem
1st person	-a - nje	-anje	-a-chu	-achu
2nd person	-a - we	-awe	-a-nyu	-anyu
3rd person (class ½)	-a - ge	-age	-a-bu	-abu

In addition, I posit, following Harjula (2004), that the possessive pronouns may be suffixed directly to some nouns to denote the semantic meaning of kinship or affinity. In this form, the possessive pronoun retains its optional determiner pre-prefix. Consider the following examples:

(40) a. Uraboonye (**u**)mukóobwaanje?

u - ra - bon-e (u) -mu-kóobwa - a - nje
 2SG-PRES-see-PERF (Ppfx)-1-daughter-GEN-me
 ‘Have you seen my daughter?’

b. Genda imuhira ubwiire (**u**)mwíshwaawe avome amazi

Ø - gend-a i - muhira u-bwiir-e (u)- mu-íshwa- we a - vom- e a - Ø-mazi
 2SG-go-FV 23LOC-home 2SG-tell-SBJV Ppfx-3-nephew-you 3SG-fetch-SBJV Ppfx-6-water
 ‘Go home tell your nephew to fetch water.’

Furthermore, possessive pronouns in igiHa can also be nominalized with the locative class 18 agreement prefix (mu-) or locative class 23 locatives (i-) agreement prefix, depending on the dialect spoken (Table 8). This form of possessives occurs without a lexical head noun and it does not take a Determiner pre-prefix. The reason why the Determiner pre-prefix does not co-occur with locative affixes is that locative affixes seem to perform similar functions to that of the Determiner pre-prefix.

Table 12: Nominalized possessive

	Singular	Plural
1 st person	iwaanje/muwaanje	iwaachu/muwaachu
2 nd person	iwaawe/muwaawe	iwaanyu/muwaanyu
3 rd person	iwaage/muwaage	iwaabu/muwaabu

Thus, the core root of the possessive form in igiHa is a preposition-like genitive morpheme, **-a**, that connects two nominal elements, namely the possession nominal and the other that realizes the possessor nominal. The agreement is realized between the dependent constituent, that is, the possessor and the genitive **-a**. Similarly, when the possessor is a lexical noun, an appropriate agreeing morpheme, coreferential with the preceding head possession nominal, is prefixed to the genitive morpheme.

In addition, the igiHa possessive may also be formed with the sense that it does not denote a literal possessor as such, but rather an attribute or location of the antecedent. These genitives are formed by a genitive **-a** which is phonologically omitted before the Determiner pre-prefix of the antecedent as exemplified in (41) below.

(41) a. Umwubasi ar’ubase inzu (i)y’amabuye.

u - mu-basi a - ra- ubak - e i- n- zu i- a a-ma-buye
 Ppfx-1-builder AgrS-PRES-build-PERF Ppfx-9/10-house Agr-GEN Ppfx-6-stone
 ‘The builder has built a/the house of stones.’

b. Ndamenye **inaga (i)y'amagwa.**

n - ra - men - e i- Ø-naga i- a - amagwa
 1SG-PRES-break-PERF Ppfx-5-pot Agr-GEN-beer
 'I have broken a pot of beer.'

The examples above illustrate that the possessive does not realize the semantic possessor of the referents **inzu** 'house' and **inaga** 'pot'. The possessive in the subject rather denote the attributes of the referents. Morphologically, the possessive can take an optional Determiner pre-prefix.

Syntactically, the possessor which is the modifier, in this case, canonically follows the possessee nominal; that is, the head noun introduced by the genitive **-a** as exemplified in (42a) below. In this canonical order, the possessor nominal can have an optional Determiner pre-prefix. However, this order is not rigid since the possessor noun can precede the possessee noun. In this regard, the possessor is immediately followed by the prosodic pause before the possessed noun. The possessive pronoun (the possessor) exhibits an obligatory Determiner pre-prefix if it precedes the possessee lexical noun, as illustrated in (42b) below.

(42) a. **Umwaana (u)waanje** arasoma **igitabo (i)chaage.**

u- mu-ana (u) - u a- nje a- ra-som-a i- gi-tabo ki - a - ge
 Ppfx-1-child (Ppfx)-1-Gen-me AgrS-PRES-read-FV Ppfx-7-book 7-GEN-his/her
 'My child reads his book.'

b. **Ichaanyu, igitabo** kigugwa ijana.

i- ki- a- nyu i- ki-tabho ki- gur- u- a ijana
 Ppfx-Agr-GEN-2PL Ppfx-7-book AgrS-sell-PASS-PRES hundred
 'Your book is sold one hundred.'

The possessive pronoun takes a mandatory Determiner pre-prefix when it occurs without an overt possessee lexical noun, hence *pro* head. Consider the following example:

(43) Speaker A: Abáana bandé baguze ibitébe?

A - ba-áana ba-ndé ba- gur- e I - bi-tébe
 Ppfx-2- child 2-whose AgrS-buy-PERF Ppfx-2-chair
 'Whose children have bought books.'

Speaker B: **Abaawe**

a - ba- a - we
 Ppfx-2- GEN-you
 Lit: [Specifically] of me.

The possessive form can be used predicatively. Unlike adjectives, the possessive form that is used predicatively takes a mandatory Determiner pre-prefix, as exemplified in (44) below:

- (44) a. Umupira uwu ni **uwaanjé**
 u- mu-pira u- u- Ø ni u- u- a -njé
 Ppfx-3- ball DEMrt-3-PROX Cop Ppfx-3-GEN-me
 ‘This ball is mine.’
- b. Akabwa gatóoyi **n’akawabu**.
 a - ka-bwa ka-tóoyi ni a- ka- a - bu
 Ppfx-12-dog 3-small Cop Ppfx-12-GEN-them
 ‘A/the small dog is theirs.’

The genitive **-a** corresponds to a prepositional-like constituent that heads the possessive phrase. One can translate it as ‘of (something)’. It connects two constituents, similarly to the property of prepositions. However, the difference is that the genitive **-a** takes the agreement prefix co-referential with the noun class prefix of the antecedent lexical noun.

Regarding the semantic features of (in)definiteness and (non-)specificity, the possessive phrase is interpreted as inherently neutral. Sometimes, the interpretation of the (in)definiteness and (non-)specificity depends on the affinity between the discourse-pragmatic context and morpho-syntax of the possessive complement, especially when the possessor is a lexical noun, as the following example (45):

- (45) Ndamutumye agende kugura **umwaana w’impene**, nyamara aguze **uw’imbwa**.
 n - ra - mu-tum-e a - gend-e ku-gur-a u - mu-aana u-a i -n- hene
 1SG-PRES-OM-buy-PERF AgrS-go-SBJV INF-buy-FV Ppfx-1-child 1-GEN Ppfx-6-goat
- nyamare a - gur - e u - u - a i - n - mbwa
 but AgrS-buy-PERF Ppfx-1-GEN Ppfx-9/10-dog
 ‘I sent him to buy a goat’s young-one but he bought the dog’s.’

In the first part of the sentence in (45), a lexical noun, the possessee **umwaana** ‘young animal’ occurs and the possessor **impene** ‘goat’. In the second part of the utterance, the speaker omits the possessee noun **umwaana** ‘young-one’ because its reference has been established in the preceding part of the utterance. In this regard, the speaker assumes that the hearer can identify the referent **umwaana** ‘child’, i.e. ‘young-one’ from the preceding part of the same utterance. In this context, the nominal expression **uw’imbwa** ‘the dog’s’ is interpreted as definite by the virtue of familiarity. Similarly, the possessive phrase **uw’imbwa** ‘the dog’s’ takes an obligatory determiner pre-prefix which I regard in this study to encode features of both specificity and contrastive focus. Thus, the possessive form **uw’imbwa** encodes the feature of specificity. It is

specific because the speaker has the particular referent **umwaana** in mind. Regarding the information structural feature of contrastive focus, the possessive form **uw'imbwa** is interpreted as the entity which is selected from other alternative young animals in the context which do not include dogs. These alternative young animals are known implicitly because they are not explicitly mentioned in the utterance.

The following examples illustrate the discourse-pragmatic interpretations of the DP containing the possessive form with and without the Determiner pre-prefix, respectively:

(46) a. Umuhungu uwu arakunda **impene iyaawe**.

u-mu-hungu u - u - Ø a -ra - kund-a i - n - hene i - a we
Ppfx-1-boy DEMrt-1-PROX AgrS-PRES-like-FV Ppfx-9/10-goat 6-GEN-you
'The/a boy likes your goat.'

b. Umuhungu uwu arakunda **amata ay'impene**.

u-mu-hungu u - u - Ø a -ra - kund-a a - Ø-mata a - i - a i - n - hene
Ppfx-1-boy DEMrt-1-PROX AgrS-PRES-like-FV Ppfx-6-milk Ppfx-6-GEN Ppfx-9/10-goat
'The/a boy likes specifically goat's milk.'

c. **Ay'impene amata**, umuhungu uwu arakunda.

a - i - a i - n - hene a - Ø-mata u-mu-hungu u - u - Ø a - ra - ya- kund-a
Ppfx-6-GEN Ppfx-9/10-goat Ppfx-6-milk, Ppfx-1-boy DEMrt-1-PROX AgrS-PRES-OM-like-FV
'Specifically the goat's milk, the/a boy likes it'

d. Speaker A: Umuhungu uwu akunda amata y'iki?

u-mu-hungu u - u - Ø a - kund-a a - Ø-mata i -a iki
Ppfx-1-boy DEMrt-1-PROX AgrS-like-FV Ppfx-6-milk 6-GEN Q.what
Lit: The/a boy likes the milk of what?

Speaker B: **Ay'impene**.

a - i - a i - n - hene
Ppfx-6-GEN Ppfx-9/10-goat
'Specifically the known of goats.'

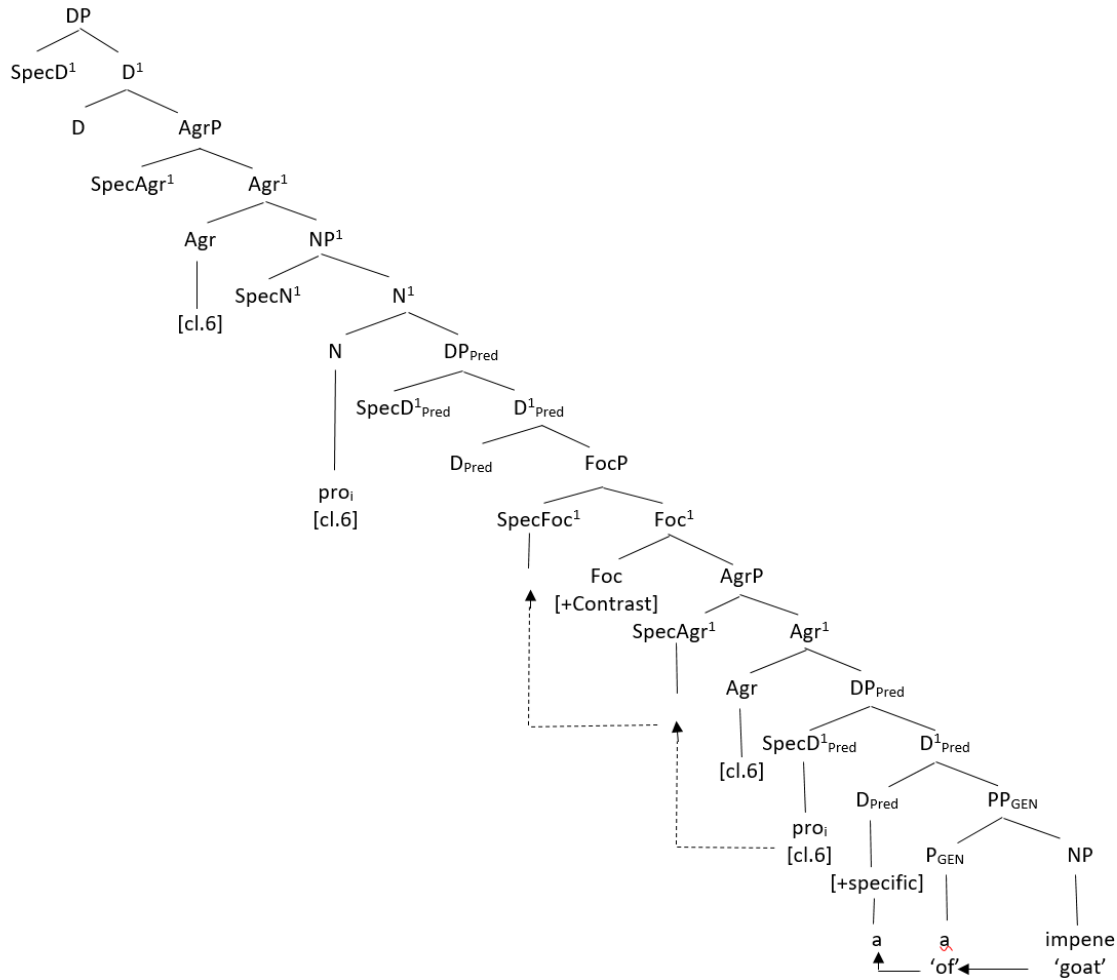
The possessor in the example (46a) takes its canonical syntactic position, i.e., after the lexical noun (the possession). In its canonical syntactic position, the possessor occurs without the Determiner pre-prefix. In this regard, the nominal expression in the subject is interpreted as neutral in terms of (in)definiteness and (non-)specificity. In example (46b) the possessor exhibits the Determiner pre-prefix which introduces the semantic feature of specificity and the information structural feature of contrastive focus, but it is still neutral in terms of (in)definiteness. The definiteness reading can be obtained through an appropriate pragmatic

context. Similarly, to other nominal modifiers such as adjectives, numerals, and clausal relatives the Determiner pre-prefix occurring in the inflection of the possessor in (46b) encodes specificity, thus drawing the attention of the hearer to one specific referent selected from the implicit choices available in the discourse context.

The possessor in (46c) uncanonically occurs before the possessee lexical head noun. Like other nominal modifiers in igiHa, the occurrence of the possessor in uncanonical position exhibits an obligatory Determiner pre-prefix. In this regard, like for other nominal modifiers, elements in the pre-nominal position are interpreted with the reading that the speaker assumes the hearer to be aware of the referent **amata** ‘milk’. In the pre-nominal position, the possessor in (46c) occurs with an obligatory Determiner pre-prefix. Thus, the nominal expression in (46c) encodes the semantic features of definiteness and specificity. It is definite under the familiarity principle, and specific because the speaker has the specific referent **amata** ‘milk’ in mind.

Furthermore, the conversation in (46d) illustrates that the possessor exhibits a compulsory Determiner pre-prefix occurring with a phonologically empty *pro* head, the head lexical noun being absent because it is assumed to be familiar to the interlocutors. In this regard, the referent encodes anaphoric inference. Thus, the nominal expression in (46d) **ay’impene** manifests the semantic feature definite through the familiarity principle. In addition, the possessor **ay’impene** ‘the of goats takes a mandatory Determiner pre-prefix, which I posit in this study to encode the features of specificity and contrastive focus. Concerning Repp's (2016) proposal of alternative set(s), the nominal expression **ay’impene** invokes the implicit set of alternatives. This means that the speaker wants the hearer to identify the specific referent out of other alternative entities which are not mentioned overtly in the utterance. Similarly, to other nominal modifiers such as adjectives, numerals, and clausal relatives, I propose that the Determiner pre-prefix which occurs in the inflectional morphology of the possessive form is analyzed as a DP_{Pred}. Considering its interpretative properties, the structural representation of the DP constituent uttered by Speaker B in (46d) above is as follows:

- (47) The Phrase structure for the *pro* head DP [ay’impene] representing the igiHa sentence:
 Ay’impene
 ‘Specifically the known of goats.’



I posit that the focused constituent in the tree diagram above moves successive cyclically to the position SpecFoc¹, where it then occurs in a Specifier-head relation with the Focus head, a relation similarly to the Spec-head agreement relation. Consequently, the relation between the focused constituent and the Focus head is considered as being a Specifier Focus-head agreement relation in the DP, similarly to that for the clausal structure proposed by Mursell (2016).

5.5.2 The co-occurrence of the possessive and nominal modifiers with the semantic feature of definiteness

Like other nominal modifiers, the possessive can co-occur and different nominal modifiers with the semantic feature of definiteness, including the demonstrative and other anaphoric determiners. The syntactic position of the co-occurrence combination of the possessive and the demonstrative is generally after the lexical head noun, i.e. post-nominally. With the anaphoric

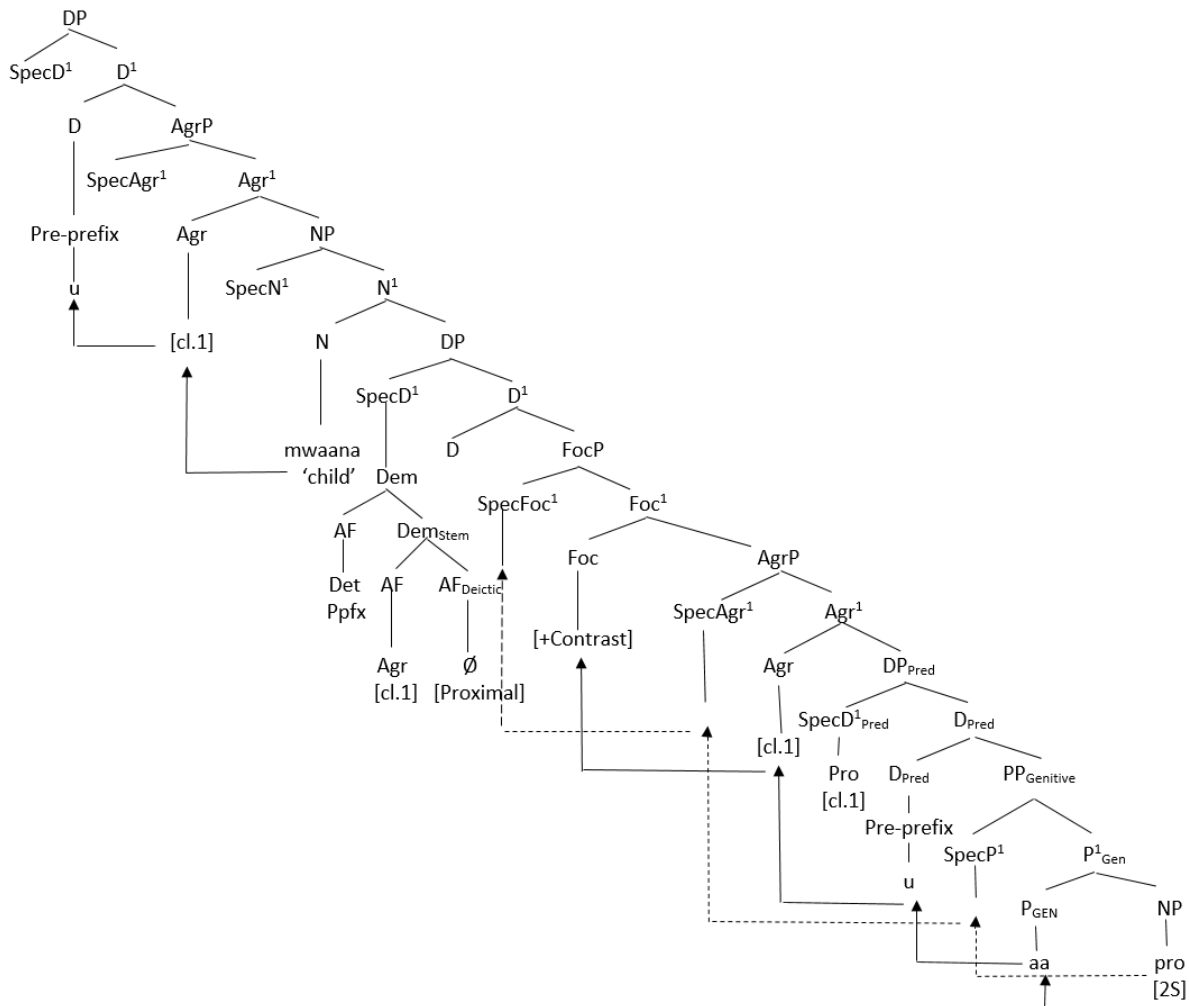
determiner **-nya** and **-áá** which strictly occupy the pre-nominal position, the possessive usually occupies the position after the lexical head noun. In addition, the possessive can optionally exhibit, under certain discourse-pragmatic conditions, the Determiner pre-prefix in its inflection, as exemplified below:

(48) a. **Uwu (u)mwaana waawe** arakunda amata.
 u - u - Ø u -mu-aana u - aa - we a - ra - kund-a a - ma-ta
 DEMrt-1-PROX Ppfx-1-child 3-GEN-you AgrS-PRES-like-FV Ppfx-6-milk
 Lit: This child of yours likes milk.

b. **Umwaana uwu (u)waawe** arakunda amata.
 u - mu-aana u - u - Ø u - aa- we a - ra - kund-a a - ma-ta
 Ppfx-1-child DEMrt-1-PROX 3-GEN-you AgrS-PRES-like-FV Ppfx-6-milk
 Lit: This child of yours likes milk.

Since the demonstrative and the anaphoric determiners are inherently definite and specific, the DP containing these modifiers can also be interpreted as having the semantic features of definiteness and specificity. The occurrence of the Determiner pre-prefix in the inflection of the possessive modifier is associated with the additional feature of specificity and the information structural feature of contrastive focus. The contrastive focus reading is associated with an explicit or implicit alternative, as proposed by Repp (2016). I posit that the Determiner pre-prefix occurring in the inflection of the possessive modifier in (48b), for instance, is a functional category, Determiner predicate (D_{Pred}), that heads a DP predication projection which is specified for features [+specificity, +contrastive focus]. Taking into account the interpretative features of the sentence in (48b), the structural representation of the DP constituent is as follows:

(49) The Phrase structure [umwaana uwu uwaawe] in igiHa sentence:
Umwaana uwu (u)waawe arakunda amata.
 ‘Lit: This child of yours likes milk.’



5.5.3 The co-occurrence of the possessive and nominal modifiers with the semantic feature of (in)definiteness and (non-)specificity

This sub-section examines the co-occurrence of the possessive and other nominal modifiers that have a neutral semantic feature of (in)definiteness and (non-)specificity. When all these nominal modifiers co-occur in the same DP nominal expression the word order is usually N-NUM-ADJ-POSS-REL. The following examples illustrate this order:

- (50) a. **Urutoke rugufi gwaanje** ruravunise.
 u - ru-toke ru-gufi ru - a - nje ru - ra - vunik-e
 Ppfx-11-finger 11-short 11-GEN-me AgrS-PRES-break-PERF
 ‘My short finger has broken.’
- b. **Urutoke rumwe gwaanje** ruravunise.
 u - ru-toke ru-gufi ru-mwe ru - ra - vunik-e
 Ppfx-11-finger 11-short 11-one AgrS-PRES-break-PERF

‘My one finger has broken.’

c. **Urutoke gw’umwaana gwónkunda ruravunise.**

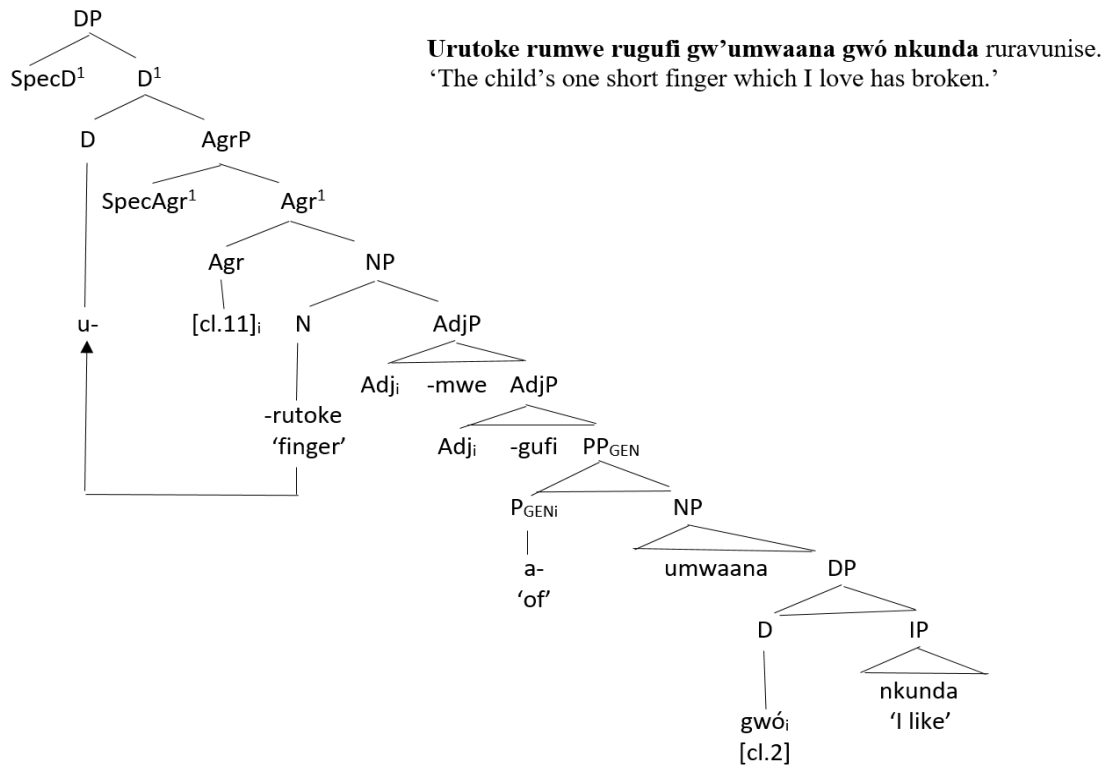
u - ru-toke ru- ó - u - mu-aana ru- ó - n - kund-a ru- ra - vunik- e
 Ppfx-11-finger 11-REL-1SG-1-child 11-REL-1SG-like-FV AgrS-PRES-break-PERF
 ‘The child’s finger which I like has broken.’

d. **Urutoke rumwe rugufi gw’umwaana gwó nkunda ruravunise.**

u - ru-toke ru-gufi ru - a u-mu-aana ru- ó - n - kund-a ru - ra - vunik-e
 Ppfx-11-finger 11-short 11-GEN-Ppfx-1-child 11-REL-1SG-like-FV AgrS-PRES-break-PERF
 ‘The child’s one short finger which I like has broken.’

The semantic interpretation of the DPs containing nominal modifiers that have a neutral semantic feature with respect to (in)definiteness and (non-)specificity co-occurring in the same DP without the Determiner pre-prefix is, therefore, [+/-definite, +/-specificity]. Considering these interpretative features of the DP in the sentence (50d), which can be represented in a phrase structure as follows:

- (51) The Phrase structure [Urutoke rumwe rugufi gw’umwaana gwó nkunda] in the sentence:
 Urutoke rumwe rugufi gw’umwaana gwó nkunda ruravunise.
 ‘The child’s one short finger which I like has broken.’



Any of these nominal modifiers co-occurring in the same DP nominal expression can appear with its Determiner pre-prefix depending on which entity the speaker wants the hearer to pay attention to. As has been argued with regard to other nominal modifiers, the occurrence of the Determiner pre-prefix is associated with certain discourse-pragmatic considerations. When the Determiner pre-prefix appears with any of the nominal modifiers in (51) it encodes the features of specificity and contrastive focus. As stated above, I contend that the Determiner pre-prefix occurring with nominal modifiers in *igiHa* is a functional category DP predication, D_{Pred} , introducing DP predication projection (see Panagiotidis and Marinis, 2011).

5.6 Summary

This chapter examined three nominal modifiers that have an inherent neutral feature concerning (in)definiteness and (non-)specificity. These nominal modifiers, in particular, are the adjective, the numeral, and the clausal relative. The chapter explored their morpho-syntactic structure, as well as their discourse-pragmatic interpretation in DPs. Morphologically, it was demonstrated that all three modifiers have the agreement prefix analogous to the noun class prefix of the antecedent lexical head noun. Regarding the canonical syntactic position, all the three nominal modifiers were argued to occupy the position after the lexical head noun. As for the clausal relatives, the chapter has demonstrated that the morphology of both the direct and indirect clausal relatives exhibits a relative clause high tone. The relative high tone is realized on the nucleus of the tense syllable for the direct clausal relative, and the relative morpheme **-6** for the indirect clausal relative. In addition, all the nominal modifiers examined in this chapter have been argued to exhibit an optional Determiner pre-prefix. Concerning the co-occurrence of two of these modifiers in one DP nominal expression, the chapter has demonstrated that they do not exhibit a fixed word order. Regarding the semantic interpretation of the *igiHa* DP containing these nominal modifiers, I argued in this chapter that they encode a neutral feature regarding (in)definiteness and (non-)specificity. However, the occurrence of the determiner pre-prefix in the inflectional morphology of these nominal modifiers encodes both the semantic feature of specificity and the information structural feature of contrastive focus. Where these modifiers occur with a phonologically empty head *pro*, the DP is interpreted as [+definite, +specific, +contrastive focus] because the absence of the lexical head noun yields an anaphoric reading which is associated with a definite reading in terms of Lyons's (1999) familiarity principle. The

absence of a lexical head noun necessitates the occurrence of an obligatory determiner pre-prefix that is associated with features of specificity and contrastive focus. Finally, this chapter has argued, analogously to Panagiotidis and Marinis's (2011) views of the definite determiner that occurs with the adjective modifiers in Modern Greek, that the *igiHa* Determiner pre-prefix occurring in the inflectional morphology of nominal modifiers such as the adjective, the numeral, and the clausal relative is analyzed as a functional category, Determiner D_{Pred} , introducing a DP predication phrase.

CHAPTER SIX

THE QUANTIFIER, ENUMERATIVE, AND INTERROGATIVE MODIFIERS

6.1 Introduction

This chapter is devoted to investigating the morpho-syntax of quantifier nominal modifiers and enumeratives in igiHa, assuming the broad framework of Generative syntax. It also explores nominal modifiers denoting questions, to which I refer as interrogative modifiers. The chapter will examine the morphology, the syntactic distribution, and the associated discourse-pragmatic interpretations of different quantifier, the enumerative, and interrogative modifiers in igiHa. I postulate that the emphatic pronoun and quantifiers such as **oose** ‘all’ and the distributive **huri** have an intrinsic feature of definiteness, while enumeratives and interrogatives have an intrinsic semantic feature of indefiniteness. In addition, this chapter examines the co-occurrence of quantifiers, enumeratives, and interrogatives with other nominal modifiers, including the demonstrative, anaphoric determiners, the adjective, the numeral, and the clausal relative. In this regard, I will postulate that the optional or obligatory occurrence of the Determiner pre-prefix in the inflection of either some of these modifiers, or on the lexical head noun encodes the discourse-pragmatic features of specificity and contrastive focus, invoking proposals of Lyons (1999) and Repp (2016).

The chapter is organized in the following way: Section 6.2 presents a discussion of igiHa quantifiers and the emphatic pronoun. Quantifiers discussed in this section include **-óóse** ‘all’, **-o-o-se** ‘any’, **huri** ‘every’, and **-sa** ‘only’. The next section 6.3 examines the enumerative nominal modifiers, including **-enshi** ‘many/a lot’, **-mwe** ‘alone/some’, **nyene** ‘as for him/her’, and **nka-** ‘like/similar’. Section 6.4 investigates the morpho-syntactic structure and interpretative properties of the interrogative modifiers **-nde**, **-he**, **-nte**, and **-ki**. Section 6.5 presents the summary of the chapter.

6.2 Quantifiers

I posit three inherently definite quantifiers for igiHa, namely **-oose**, **huri**, and **-sa**. Although the quantifier **huri** ‘every’ and the quantifier **-sa** ‘only’ do not have a common (root) morpheme in their morphological structure, like that of the quantifier **-óóse**, their semantic interpretations can

be considered a justification for including them in this section. Quantifiers with stems such as **-óóse** ‘all/both/whole’ and **huri** ‘every’ are considered to express the totality of the entities or mass in the discourse situation, which fulfills the inclusiveness criterion. Concerning the semantic feature of specificity, these two quantifiers manifest a non-specificity reading. However, the occurrence of the optional Determiner pre-prefix in the inflection morphology of a non-specific modifier can encode a specificity and contrastive focus reading. In addition to the quantifier **-óóse**, the distributive **huri**, and the emphatic pronoun are examined in this section because they have in common both morpho-syntactic structure and semantic-pragmatic features with the given quantifiers. The next sub-section explores the emphatic pronoun.

6.2.1 The emphatic pronoun

6.2.1.1 Meaning and morpho-syntactic structure of the emphatic pronoun

The emphatic pronoun is a nominal modifier that denotes that the noun it refers to is known by all interlocutors, i.e., the referent is familiar because it has already been established in the preceding discourse context. The emphatic pronoun is alternatively known as an absolute pronoun (c.f. Allen, 2014; Makanjila, 2019; Petzell, 2008) and independent pronoun (c.f. Harjula, 2004). The speaker and the hearer are familiar with the referent as it has already been mentioned in the preceding discourse.

The morphology of the igiHa emphatic pronoun comprises the agreement prefix of the antecedent noun, which is followed by the quantifier root **-ó**. In addition, this quantifier root bears a high tone which is associated with the reading of emphasis. The emphatic pronoun does not permit the determiner pre-prefix, in contrast to other nominal modifiers. This can be attributed to the fact that the quantifier root **-ó** inherently has both the semantic features of definiteness and specificity. The quantifier root **-ó** can occur with lexical nouns in all noun classes except for the locative classes 17, 18, and 23. The emphatic pronoun in locative class 16 extends to other locative classes. Table 13 illustrate the different noun class forms:

Table 13: The morphological structure of the emphatic pronoun -ó

Noun Class	Emphatic pronoun	Morphological structure	Nominal expression	Gloss
1 -mu-	wó	u - ó	umukobwa wó	‘as for the girl’
2 -ba-	bó	ba - ó	abakobwa bó	‘as for girls’
3 -mu-	wó	u - ó	umugazo wó	‘as for the ditch’
4 -mi-	yó	i - ó	imigazo yó	‘as for ditches’
5 -ri/Ø-	dyó	ri - ó	izuuru dyó	‘as for the nose’
6 -ma-	yó	ma - ó	amazuuru yó	‘as for noses’
7 -ki-	chó	ki - ó	igitunguru chó	‘as for the onion’
8 -bi-	vyó	bi - ó	ibitunguru vyó	‘as for onions’
9 -N-	yó	i - ó	inzoka yó	‘as for the snake’
10 -N-	zó	zi - ó	inzoka zó	‘as for snakes’
11 -ru-	gwó	ru - ó	uruyige gwó	‘as for the locust’
12 -ka-	kó	ka - ó	agapira kó	‘as for the small ball’
13 -tu-	twó	tu - ó	udupira twó	‘as for small balls’
14 -bu-	bwó	bu - ó	uburiri bwó	‘as for the bed’
15 -ku-	kwó	ku - ó	ugutwi kwó	‘as for the ear’
16 -ha-	hó	ha - ó	ahantu hó	‘as for the place’
17 -ku-	-	-	-	-
18 -mu-	-	-	-	-
23 -i-	-	-	-	-

Syntactically, the igiHa emphatic pronoun **-ó** usually occurs in post-nominal position, i.e. after the lexical head noun, as illustrated in (1a). However, this structure is not rigidly fixed because the emphatic pronoun **-ó** may also occur in the pre-nominal position, in which case the lexical head noun exhibits an optional Determiner pre-prefix. In this structure, the emphatic pronoun is followed by an obligatory prosodic pause, as demonstrated in (1b) below:

- (1) a. **Umugabogabo wó** aragusekura.
 u - mu-gabogabo u - ó a - róó - ku - sekur-a
 Ppfx-1-man 2-EMPH AgrS-FUT-OM-pound-FV
 ‘As for the man, he will pound (beat severely) you.’
- b. **Wó, (u)mugabogabo** aragusekura.
 U - u - ó u - mu-gabogabo a - róó - ku - sekur-a
 Ppfx-2-EMPH Ppfx-1-man AgrS-FUT-OM-pound-FV
 ‘As for the man, he will pound (beat severely) you.’

The morphological structure of the emphatic pronoun **-ó** is distinct from that of the medial demonstrative that expresses referents close to the hearer (cf. 4.2.1), and/or the pronominal introducing the indirect clausal relative (cf. 5.4.1).

Regarding the discourse-pragmatic inference, the emphatic pronoun **-ó** encodes both features of definiteness and specificity. Its definiteness feature is expressed through the familiarity factor, in the sense that the emphatic pronoun **-ó** is associated with a referent which is presumed to be familiar to both interlocutors in the discourse context. The emphatic pronoun **-ó** encodes the feature of specificity in that it refers to a referent that is particularized in the mind of the speaker. For instance, the speaker in the utterance provided in (1a) above is talking of the referent **umugabogabo** ‘man’, who is well known by interlocutors in the discourse context. The emphatic **wó** expresses emphasis that indicates that the discourse participants have a specific referent in mind. Thus, the DP **umugabogabo wó** ‘as for the man’ in (1a) denotes the semantic features of definiteness and specificity.

When the emphatic pronoun uncanonically appears before the lexical head noun, i.e. in pre-nominal position, like in example (1b), the DP receives an additional reading of emphasis. In addition to the uncanonical word order, the occurrence of an optional Determiner pre-prefix accompanied by the pre-nominal prosodic pause encodes a reading of additional specificity, and a reading of contrastive focus. This interpretation of contrastive focus entails that the hearer can point out the specific man from other implicitly alternative men available in the discourse context. This means that there are other men in the discourse context, but they are not explicitly mentioned in the speaker’s utterance, who are contrasted with the specific man being referred to.

Another type of the emphatic pronoun in igiHa is formed by a preposition-like element **na-**. This preposition-like element takes an agreement suffix corresponding to the noun class prefix of the head noun, and the quantifier root **-ó** which obligatorily bears a high tone. The following table 14 presents the structure of igiHa emphatic pronoun with this preposition-like element **na-**.

Table 14: Morphological structure emphatic pronoun na-

Noun Class	Preposition	Agreement prefix	Quantifier root	Example	Structure
1 -mu-	na	-u-	-ó	nawó	na-u-ó
2 -ba-	na	-ba-	-ó	nabó	na-ba-ó
3 -mu-	na	-u-	-ó	nawó	na-u-ó
4 -mi-	na	-i-	-ó	nayó	na-i-ó
5 -ri/ø-	na	-ri-	-ó	nadyó	na-ri-ó
6 -ma-	na	-i-	-ó	nayó	na-i-ó
7 -ki-	na	-ki-	-ó	nachó	na-ki-ó
8 -bi-	na	-bi-	-ó	navyó	na-bi-ó
9 -N-	na	-n-	-ó	nayó	na-i-ó
10 -N-	na	-n-	-ó	nazó	na-i-ó
11 -ru-	na	-ru-	-ó	nagwó	na-ru-ó
12 ka-	na	-ka-	-ó	nakó	na-ku-ó
13 tu-	na	-tu-	-ó	natwó	na- tu-ó
14 bu-	na	-bu-	-ó	nabwó	na- bu-ó
15 ku-	na	-ku-	-ó	nakwó	na - ku-ó
16 ha-	na	-ha-	-ó	nahó	na- ha-ó
17 ku-	-	-	-	-	-
18 mu-	na	-mu-	-ó	namwó	na- mu-ó
23 -i-	-	-	-	-	-

The preposition-like **na-** can combine with the grammatical morphemes denoting persons and the quantifier root **-ó** to form what I call a grammatical emphatic personal pronoun, as illustrated in table 15:

Table 15: The morphological structure of the grammatical emphatic personal pronoun

Person	Preposition	Grammatical person	Quantifier root	Example	Structure	Gloss
1SG	na	-j-	-e	naje	na-j-e	‘as for me’
1PL	na	-tu-	-e	natwe	na-tu-e	‘as for us’
2SG	na	-u-	-e	nawe	na-u-e	‘as for you’
2PL	na	-mu	-e	namwe	na-mu-e	‘as for you’
3SG (class 1)	na	-u-	-ó	nawó	na-u-ó	‘as for her/him’
3PL (class 2)	na	-bu-	-ó	nabó	na-bu-ó	‘as for them’

The grammatical emphatic personal pronoun in table 15 contains the quantifier root **-ó**, except for the first and second person singular and plural.

Another form of the emphatic pronoun occurs in a copulative clausal structure in igiHa, which I refer to as the copulative emphatic pronoun. It is formed by the copular **ni-** which is suffixed by the agreement prefix, and the quantifier root **-ó** as summarized in table 16.

Table 16: The morphological structure of the copulative emphatic pronoun

CL	Copular verb	Agreement prefix	Quantifier Root	Example	Structure
1	ni	-u-	-ó	niwó	ni-u-ó
2	ni	-ba-	-ó	nibó	ni-ba-ó
3	ni	-u-	-ó	niwó	ni-u-ó
4	ni	-i-	-ó	niyó	ni-i-ó
5	ni	-ri-	-ó	nidyó	ni-ri-ó
6	ni	-i-	-ó	niyó	ni-i-ó
7	ni	-ki-	-ó	nichó	ni-ki-ó
8	ni	-bi-	-ó	nivyó	ni-bi-ó
9	ni	-n-	-ó	niyó	ni-i-ó
10	ni	-n-	-ó	nizó	ni-i-ó
11	ni	-ru-	-ó	nigwó	ni-ru-ó
12	ni	-ka-	-ó	nikó	ni-ku-ó
13	ni	-tu-	-ó	nitwó	ni-tu-ó
14	ni	-bu-	-ó	nibwó	ni-bu-ó
15	ni	-ku-	-ó	nikwó	ni-ku-ó
16	ni	-ha-	-ó	nihó	ni-ha-ó
17	-	-	-	-	-
18	ni	-mu-	-ó	nimwó	ni-mu-ó
23	-	-	-	-	-

The copulative emphatic pronoun can be formed by the grammatical person and number morpheme, and the quantifier root **-ó**, as illustrated in table 17.

Table 17: The morphological structure of the emphatic pronoun with grammatical persons and connective index na-

Person	Copular verb	Grammatical person	Quantifier root	Example	Structure
1SG	na	-j-	-e	naje	na-j-e
1PL	na	-tu-	-e	natwe	na-tu-e
2SG	na	-u-	-e	nawe	na-u-e
2PL	na	-mu	-e	namwe	na-mu-e
3SG (class 1)	na	-u-	-ó	nawó	na-u-ó
3PL (class 2)	na	-ba-	-ó	nabó	na-ba-ó

Syntactically, the prepositional-like **na-** and the copulative emphatic pronouns canonically follow the lexical head noun, as in (2a). Both the preposition-like **na-** and the copulative emphatic pronouns can appear in the pre-nominal position when the speaker wants to add extra emphasis, as in (2b). As pointed out earlier in this section, the emphatic pronouns are used to denote referents already introduced in the prior discourse context. The preposition-like **na-** and the copulative emphatic pronoun can structurally occur with a phonologically empty *pro* head, representing a context where the lexical head noun is already known and is no longer the topic of the utterance (2c). Thus, the function of the emphatic pronoun is to express an entity which is familiar to the interlocutors, and which the speaker has in mind. Consider the following examples in (2):

(2) a. Abáana banini **nabó** ntibayobora gusiimba.

a-ba-áana ba-nini na -ba-o nti -ba-yobor-a ku- siimb-a
 PFX-2-child 2-big PREP-2-EMPH NEG-2-able-FV INF-jump-FV
 ‘As for the big children they cannot jump.’

b. **Nawó** Databuja aramubwira, “Ekaye. Hakaroogira uwurokwicha Kaini aroohogwa ingere indwi...” (Genesis 4:15)

na -u - ó Databuja a - ra - mu-bwir-a ekaye ha - ka -roo-gir-a
 PREP-1-EMPH 1. person AgrS-PRES-OM-tell-FV no 16-PRSTV-FUT-do-FV
 Lit: ‘As for the Lord, he told him, ‘No. he who will do’

u - wu-roo -ku - ich-a Kaini a-róó-hoog-w-a ingere ndwi.
 3SG-SM-FUT-INF-kill-FV 1. person AgrS-FUT-beat-PASS-FV times seven
 Lit: ...to kill Cain will be bitten seven times.’

c. Hanyuma Databuja arabamuza Kaini ati, ‘Murumuna wawe Habili ari hehe?’ **Nawó** yishura ngo, ‘Simenya, none ndi umuzigamyi wa mwenewachu?’ (Genesis: 4:9)
 ‘Lit: Thereafter, the Lord asked Cain, ‘Where is your young brother Abel?’ **As for him**, he responded, ‘I do not know, am I the guide of my relative?’

As stated earlier in this chapter, all types of emphatic pronouns in igiHa intrinsically encode the features of [+definite, +specificity]. They have the feature of definiteness in that they express referents that are presumed to be known by both interlocutors. In addition, emphatic pronouns in igiHa express the feature of specificity because the referent is presumed to be known in the mind of the speaker. In this regard, the emphatic pronouns in (2) are considered to possess the semantic features of [+definite, +specific]. The emphatic pronouns occurring uncanonically in the pre-nominal position in (2c-d), illustrate that emphasis is put on a familiar and particular referent. Thus, the emphatic pronoun also realizes the feature of specificity, in addition to emphasis.

The emphatic pronoun can occur with a phonologically empty head, i.e. a *pro* head, as illustrated in (2c), representing an utterance where the referent has already been established in the preceding discourse. For instance, in the script segment from the Holy Bible in (2c), the referent **Kaini** ‘Cain’ has already been introduced in the preceding sentence. Then in the second sentence, the emphatic pronoun **nawo** ‘as for him’ is used to refer to a referent that is already known in the discourse context.

In addition, the emphatic pronoun encodes the information structural feature of contrastive focus. The emphatic pronoun expresses the referent which is selected from the available alternatives in the discourse, as illustrated in the following conversation:

- (3) Speaker A: Umusi kumuhumbo uróogenda he?
 u - mu-si ku mu-humbo u - róó-gend-a he
 Ppfx-3-day 17LOC 3-evening 2SG-FUT-go-FV Q.where
 ‘Where will you go in the evening today?’

Speaker B: Ndóogenda gusora umupira.
 n - róó - gend-a ku - sor - a u -mu-pira
 1SG-FUT-go-FV INF-play-FV Ppfx-3-ball
 ‘I will go to play soccer.’

Speaker A: **Umupira niwó** wugutwaaye ubwenge.
 u-mu-pira ni- u- ó u - ku-twaar-e u - bu-enge
 Ppfx-3-ball COP-3-EMPH AgrS-OM-take-PERF Ppfx-14-brain
 Lit: The soccer is specifically the one that took your brain.’
 ‘The soccer is specifically the one that occupied your attention/mind.’

In the example provided in (3), the emphatic pronoun **niwó** denotes additional emphasis in the sense that the referent of the head is familiar to interlocutors, hence the emphatic pronoun is employed. Speaker A uses the emphatic pronoun to emphasize his/her assertion. Thus, the referent expresses not only definiteness, in the sense of being known to the speaker and hearer (Lyons, 1999), but also more emphatic reference. This additional emphasis relates to a contrastive focus reading, in the sense that, among other things available in the context, soccer is specifically the sport that took the brain (i.e. occupied the attention) of Speaker B. This implies that other alternative entities exist in the context but they do not take the brain (occupied the attention) of Speaker B. These alternative entities are not overtly mentioned in the conversation. Therefore, the alternative entities (i.e. kinds of sports) in contrasting soccer in the discourse of example (3) above are implicit alternatives (see proposals by Repp 2016).

6.2.2 The quantifier -óóse

6.2.2.1 Meaning and morpho-syntactic structure

The quantifier **-óóse** consists morphologically of an agreement morpheme and the quantifier stem **-óóse**. It can be translated as ‘whole/all/both’. It expresses the meaning of ‘the whole’ when modifying singular nouns, and the meaning of ‘all/both’ when modifying plural lexical nouns or mass nouns. The quantifier **-óóse** encodes the semantic feature of definiteness through the inclusiveness notion. It does not possess the feature of specificity, hence [+definiteness, ± specificity]

The quantifier **-óóse** is formed by the agreement prefix homophonous to the noun class prefix of the antecedent lexical head noun, and the stem **-óóse**. The inflectional morphology of the quantifier stem **-óóse** does not take the determiner pre-prefix. The following table 18 illustrates the forms for the various noun classes.

Table 18: The morphological structure of the quantifier -óóse

Noun Class	Structure	Example	Gloss
1 -mu-	u-óóse	umwaana wóóse	‘whole of child’
2 -ba-	ba-óóse	abaana bóóse	‘all children’
3 -mu-	u-óóse	umwagi wóóse	‘the whole sugarcane’
4 -mi-	i-óóose	imyagi yóóse	‘all sugarcanes’
5 -ri-	ri-óóse	idyinyo dyóóse	‘the whole tooth’
6 -ma-	i-óóse	amenyo yóóse	‘all teeth’
7 -ki-	ki-óóse	ikitebe chóóse	‘the whole chair’
8 -bi-	bi-óóse	ibitabe vyóóse	‘all chairs’
9 -N-	i-óóse	inzu yóóse	‘the whole house’
10 -N-	zi-óóse	inzu zóóse	‘all houses’
11 -ru-	ru-óóose	uruswa gwóóse	‘the whole termite’
12 -ka-	ka-óóse	agahene kóóse	‘the whole small goat’
13 -tu-	tu-óóse	uduhene twóóse	‘all the small goats’
14 -bu-	bu-óóse	ubwanwa bwóóse	‘all beards’
15 -ku-	ku-óóse	ukuguru kwóóse	‘the whole leg’
16 -ha-	ha-óóse	ahantu hóóse	‘the whole place’
17 -ku-	ha-óóse	kugitebe hóóse	‘at the whole chair’
18 -mu-	mu- óóse	mumwimbe mwóóse	‘the whole of the hole inside’
23 i-	i- óóse	iKepu Tawuni yóóse	‘the whole Cape Town’

The table above demonstrates that the quantifier has two semantic readings, namely, ‘the whole’ or ‘all/both’ depending on whether the singular or plural noun class prefix appears with the stem, as exemplified in (4a-b) below:

- (4) a. Inswi **zóóse** ziraboze.
 i- n- swi zi-óóse zi- ra- bor - e
 Ppfx-9/10-fish 3-all AgrS-PRES-decay-PERF
 ‘All the fishes got decayed.’
- b. Urugo **gwóóse** rurahongorose.
 u- ru- go ru-óóse ru- ra- hongorok-e
 Ppfx-11-fence 11-whole AgrS-PRES-drop - PREF
 ‘The whole fence has dropped.’

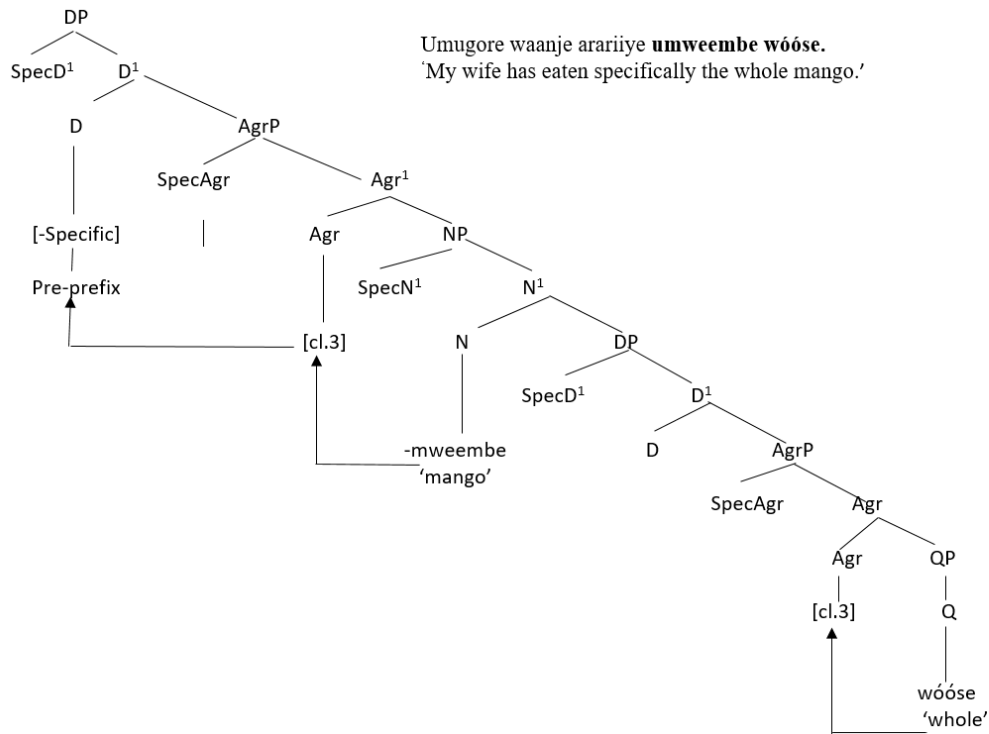
Syntactically, the quantifier **-óóse** occurs after the noun it modifies (4a-b). However, to realize a discourse-pragmatic reading of emphasis, the quantifier **-óóse** may occur before the lexical head noun. This lexical head noun cannot occur with a Determiner pre-prefix, as exemplified in (5a) below. Furthermore, **-óóse** can occur without an explicit lexical head noun, i.e. a *pro* head. It denotes anaphoric reference in the sense that the referent is familiar to the interlocutors. Unlike other nominal modifiers, the quantifier **-óóse** cannot take the Determiner pre-prefix even when used with a *pro* head (5b):

- (5) a. **Vyóóse**, bitabo biradandajwe.
 bi-óóse bi-tabo bi - ra -dandaz -w- e
 8-QUANTrt-all 8-book AgrS-PRES-sell - PASS-PERF
 ‘All the books are sold.’
- b. Speaker A: Muradandaje ibitabo bingahe?
 mu - ra - dandaz-e i-bi-tabo bi-ngahe
 2PL-PRES-sell-PERF Ppfx-8-book 7-Q.how many
 ‘How many books you have sold?’
- Speaker B: Turadandaje **vyóóse**.
 tu - ra - dandaz-e bi-óóse
 1PL-PRES-sell-PERF 8-QUANTrt-all
 ‘We have sold all of them.’
- c. Umugore waanje arariye **umweembe wóóse**.
 u-mu-gore u - a - nje a - ra - r - e u - mu-embe u-óóse
 Ppfx-1-wife 1-GEN-me AgrS-PRES-eat- PERF Ppfx-3-mango 3-QUANTrt-whole
 ‘My wife has eaten specifically the whole mango.’

As pointed out above, I consider the quantifier stem **-óóse** to encode an intrinsic semantic feature of definiteness and a generic semantic feature of (non-)specificity. The DP containing the

quantifier **-óóse** denotes a definiteness reading in terms of the inclusiveness notion since its meaning refers to the full number of all members in the set in the given discourse, where plural and mass entities are involved. Thus, the DP containing the quantifier **-óóse** has a semantic feature of definiteness in terms of the inclusiveness notion. The phrase structure representation of the DP **umweembe wóóse** in (5c) above is as follows:

- (6) The Phrase Structure of the object DP [umweembe wóóse] in igiHa sentence:
 Umugore waanje arariye **umweembe wóóse**.
 ‘My wife has eaten specifically the whole mango.’



The tree diagram in (6) above represents the DP containing the quantifier **-óóse** in igiHa with the semantic feature of non-specificity. Thus, when reference is made to a set of more than one member, none of the members in the set is specifically the intended referent. However, the uncanonical pre-nominal quantifier **-óóse** is associated with the feature of specificity in the sense that the speaker has a particular referent in mind. Thus, the speaker begins his/her utterance with the new information **vyóóse** ‘all’, and the referent as the afterthought, following a prosodic pause. Since the pre-nominal **-óóse** does not allow the lexical head noun to occur with a pre-prefix, no contrastive focus is encoded in the DP in (5a). The quantifier **-óóse** has the meaning

that includes all referents in the intended set in the context, (hence no alternative referents to contrast with a specific one are relevant).

6.2.2.2 The co-occurrence of the quantifier **-óóse** with nominal modifiers with a semantic feature of definiteness

The quantifier **-óóse** with nominal modifiers that possess an intrinsic feature of definiteness, such as the demonstrative and anaphoric determiners **-áá**, **-áá-ndi**, and **nya-**. When the demonstrative co-occurs with the quantifier **-óóse** the common position they occupy is after the lexical head, where the demonstrative precedes the quantifier **-óóse**, as in (7a). For the case of the anaphoric determiner **-áá**, the quantifier occurs in the post-nominal position while the determiner **-áá** retains its canonical pre-nominal position, as in (7b). The quantifier **-óóse** follows the anaphoric determiner **-áá-ndi** that maintains its syntactic feature of modifying a *pro* head (7c). In respect to the anaphoric determiner **-nya**, which must always occur as the prefix in the morphology of the lexical head noun, the quantifier **-óóse** occupies the post-nominal position, as exemplified in (6d):

- (7) a. **Umugezi uwu wóóse** wurimo ingona.
 u - mu-gezi u - u - Ø u-óóse u - ri - mo i - n - gona
 Ppfx-3-river DEMrt-3-PROX 3-whole AgrS-be-18CL Ppfx-10-crocodile
 ‘The whole of this river contains crocodiles.’
- b. **Wáá mugezi wóóse** wurimo ingona.
 u - mu-gezi u-óóse u - ri - mo i - n - gona
 Ppfx-3-river 3-whole AgrS-be-18CL Ppfx-10-crocodile
 ‘The whole of this river contains crocodiles.’
- c. **Cháákindi chóóse** kir’ononekaye.
 ki-áá-ki-ndi ki-óóse ki - ra - ononekar-e
 7-DET-7-other 7-whole AgrS-PRES-damage-PERF
 ‘The other whole one (something known) is damaged.’
- d. **Nyamugezi wóóse** wurimo ingona.
 nya-mu-gezi u-óóse u - ri - mo i - n-gona
 DET-3-river 3-óóse AgrS-be-18CLITIC Ppfx-10-crocodile
 ‘The whole aforementioned river contains crocodiles.’

As argued in chapter four, both the demonstrative and the anaphoric determiners are inherently definite. For instance, I argued that the deictic feature of the demonstrative renders the referent to

be definite in terms of the identifiability factor. Thus, the referent **umugezi** ‘river’ in (7a) above is identifiable in the context because of the proximal demonstrative. The anaphoric determiners are all associated with a referent that is assumed to be familiar to the speaker and the hearer. For instance, the referents in (7b-d) have anaphoric interpretations in that the referents are familiar to the speaker and the hearer. In addition, the information structural feature of contrastive focus can be manifested if the demonstrative occurs in the pre-nominal position and the quantifier **-óóse** occurs in the post-nominal position. Consider the following example (8):

- (8) **Uwu (u)mugezi wóóse** wurimo ingona.
 u - u - Ø (u) - mu-gezi u-óóse u - ri - mo i - n - gona
 DEMrt-3-PROX (Ppfx)-3-river 3-whole AgrS-be-18CL Ppfx-10-crocodile
 Lit: This river, the whole of it contains crocodiles.

The occurrence of the Determiner pre-prefix in the inflection of the lexical head noun preceded by the demonstrative yields a contrastive focus reading to the DP. This means, for the above example, that there are other rivers known by the discourse participants. The occurrence of the Determiner pre-prefix yields the reading that the hearer is able to point out the specific river from other alternative rivers which are not explicitly mentioned in the utterance, (see Repp's (2016) proposals concerning implicit alternatives).

6.2.2.3 Co-occurrence of the quantifier **-óóse** and nominal modifiers with a neutral feature of (in)definiteness

Similarly, to other quantifiers, the quantifier **-óóse** can co-occur with other nominal modifiers that have an inherent neutral feature for the semantic feature of (in)definiteness, such as the adjective, the numeral, the possessive, and the clausal relative. This co-occurrence of these modifiers is usually in the post-nominal position, where the quantifier **-óóse** follows each of the nominal modifiers with a neutral feature regarding (in)definiteness. Furthermore, each nominal modifier with such a neutral feature takes an optional Determiner pre-prefix that is associated with the semantic reading of specificity and the information structural reading of contrastive focus. Consider the following examples:

- (9) a. **Umukenke (u)mugufi wóóse** wur'ononekaye.
 u-mu-kenke (u)-mu-gufi u-óóse u - ra - ononekar-e
 Ppfx-3-straw (Ppfx)-3-short 3-whole AgrS-PRES-damage-PERF
 ‘The whole short straw is damaged.’

b. **Ubwaanwa (u)bwasokuru bwóóse buri n'imvi.**

u - bu-anwa (u)- bu - a sokuru bu-óóse bu-ri na i - n -vi
 Ppfx-14-beards (Ppfx)-14-GEN 1.grandfather 14-all AgrS-be ASS Ppfx-10-grey
 'All the grandfather's beards are gray.'

I argued in chapter 4 that the occurrence of the Determiner pre-prefix in the inflection of the nominal modifiers with a neutral feature of (in)definiteness encodes readings of specificity and contrastive focus. Thus, the occurrence of the Determiner pre-prefix on the inflection of the adjective **(u)mugufi** 'short' in (9a) and the genitive **(u)bwasokuru** 'grandfather's' in (9b) yields the DPs in (9) to have a reading of specificity and contrastive focus. The contrastive focus reading encoded for the DP denoting the referent entails that the hearer pays attention to the particular referent.

6.2.3 The quantifier **huri**

6.2.3.1 Morpho-syntactic structure of the quantifiers **huri**

The quantifier with the stem **huri** expresses a meaning equivalent to the English 'each/every'. It identifies the referent denoted by the noun belonging to a closed set of mutually exclusive items. The distributive quantifier **huri** occurs as a word that has no agreement prefix corresponding to the noun class prefix of the noun it modifies. Thus, the morphology of the quantifier **huri** cannot be decomposed further.

Syntactically, the quantifier **huri** occurs in the pre-nominal position, as in (10a). It obligatorily occurs with the lexical head noun. Like other quantifiers in igiHa, the distributive quantifier **huri** does not allow the lexical head noun to occur with a Determiner pre-prefix. In addition, the quantifier **huri** cannot occur in the post-nominal position, as exemplified by the ungrammatical and unacceptable example (10b). Since the distributive quantifier **huri** lacks agreement inflectional morphology, it cannot occur without a full lexical head noun, with a *pro* head, however, it can occur with the indefinite enumerative **-mwe** 'each' without the lexical head noun, as in (10c). In igiHa, when these two modifiers co-occur in a DP nominal expression, they require no lexical head noun. The covert noun must, however, be familiar to the interlocutors in the discourse context, as illustrated in the following examples:

- (10) a. Umupfumu aravura **huri** muntu.
 u- mu-pfumu a- ra- vur-a huri mu-ntu
 Ppfx-2-doctor AgrS-PRES-treat-FV every 1-person
 ‘The/a doctor treats every person.’
- b. *Igitabo **huri** ugomba kiriho.
 i - ki-tabo huri u- gomb-a ki-ri-ho
 Ppfx-7-book every 2SG-want-PRES AgrS-be-16.CL
 ‘Every book you want is available.’
- c. **Buri wumwe** aroomara amasomo yaage uwu umwaaka.
 huri u-mwe a - roo - mar - a a -ma-somo i - a - ge u - u - Ø u-mu-aaka
 every 1-one AgrS-FUT-complete-FV Ppfx-6-study 6-GEN-his DEMrt-1-PROX Ppfx-3-year
 ‘Each one (person) will complete his/her studies this year.’

The distributive quantifiers **huri** ‘every/each’ can co-occur with the quantifier **-óóse** ‘all/whole’. In this co-occurrence combination, the quantifier **huri** precedes the lexical head noun, while the quantifier **-óóse** follows the head. This co-occurrence serves to emphasize the referent being communicated about in the utterance. The following example illustrates the co-occurrence of the quantifiers **huri** and **óóse**:

- (11) Umuhungu arahekenya **huri kidonge chóóse**.
 u - mu-hung a - ra - hekeny-a huri ki-donge ki-óóse
 Ppfx-1- boy AgrS-PRES-chew-FV every 7-pill 7- QUANTrt-all
 ‘The/a boy chews every whole pill.’

Regarding the discourse-pragmatic inferences, the quantifier **huri** intrinsically possesses a feature of definiteness and it introduces a generic reading in respect to the feature of specificity. In this regard, the distributive quantifier **huri** refers to all members of a set in the discourse context, hence realizing Lyons’ (1999) notion of inclusiveness. For instance, in (10a) above, the quantifier **huri** entails that the subject nominal expression is interpreted with the reading that the hearer can identify every person who receives treatment through the inclusiveness notion. However, the quantifier **huri** does not express an intrinsic property of specificity. For example, in (11) above, the presence of **huri** may, or may not, mean that the speaker has a specific referent in mind. Hence, the DP in (11) is semantically interpreted with features [+definite, +/-specificity].

Moreover, the distributive **huri** disallows the lexical head noun to exhibit its Determiner pre-prefix optionally, hence the unacceptability of the following example:

- (12) ***Buri (u)muntu** arakunda umuziki.
 buru (u)-mu-ntu a-ra-kund-a u-mu-ziki
 Every (Ppfx)-1-ntu AgrS-PRES-like-FV Ppfx-3-music
 ‘Every person likes music.’

6.2.3.2 The co-occurrence of the distributive quantifier **huri** with nominal modifiers with a semantic feature of definiteness

The distributive quantifier **huri** cannot co-occur with any nominal modifier that is inherently definite. Unlike other quantifiers that may occur as clausal subject when they co-occur with nominal modifiers with a semantic feature of the definiteness, the distributive **huri** cannot occur in the DP subject position when modifying a DP nominal in the subject position. Consider the following unacceptable examples:

- (13) ***Buri umwaana uwu** agure amadafutari.
 huri u -mu-aana a - gur - e a-ma-dafutari
 every Ppfx-3-child AgrS-buy-PERF Ppfx-6-notebook
 ‘Each child buys a notebook.’

6.2.3.3 The co-occurrence of the distributive **huri** with nominal modifiers with a semantic feature of definiteness

The distributive quantifier **huri** can co-occur with other nominal modifiers with a neutral feature of (in)definiteness, i.e., the adjective, the possessive, the clausal relative, and the numeral. In this regard, the quantifier **huri** tends to occupy the position before the lexical head noun and other nominal modifiers follow the lexical head noun. Nominal modifiers with a neutral feature of (in)definiteness can exhibit the optional Determiner pre-prefix when they co-occur with the distributive **huri**, similarly to when they co-occur with some other nominal modifiers. Consider the following examples:

- (14) **Buri buriri (u)bugari** buradukwira.
 huri bu-riri (u)-bu-gari bu - ra - tu -kwir-a
 every 14-bed (Ppfx)-14-wide AgrS-PRES-1PL-fit -FV
 ‘Every wide bed fits us.’
- (15) **Buri buriri (u)bwó** ubonye buradukwira.
 huri bu-riri (u)-bu-ó u - bon-e bu - ra - tu -kwir-a
 every 14-bed (u)-bu-ó 2SG-see-PERF AgrS-PRES-1SG-fit-FV
 ‘Every bed which you have seen fits us.’

In the above examples, the Determiner pre-prefix occurs optionally in the inflection of the nominal modifiers with a neutral feature of (in)definiteness. Thus, the speaker can emphasize the attributive features of the referent. In this regard, the Determiner pre-prefix encodes the semantic feature of specificity and the information structural feature of contrastive focus. Therefore, the DP in example (14) can be interpreted as definite, specific, and contrastively focused. The contrastive focus is encoded in the sense that there are other similar beds in the discourse context that are implicitly known about by both the speaker and the hearer, that may not be as big as the one the speaker intends to refer to. Thus, the optional Determiner pre-prefix encodes the reading of indicating to the hearer to identify the specific big bed from other implicit alternative beds in the discourse context of the conversation. Similarly, the Determiner pre-prefix in (15) encodes the reading of indicating to the hearer the specific two beds s/he saw from other implicit alternative beds in the discourse context. As was stated in Chapter Five, I posit that the Determiner pre-prefix that occurs with nominal modifiers is a functional category Determiner predicate ($D_{Pred.}$). In this regard, the adjective is dominated by the DP_{pred} containing a *pro*, subject of the postverbal adjective. The Determiner pre-prefix, if it occurs, in the inflection of adjective, can be posited as a Determiner predicate, introducing a DP Predication phrase.

6.2.4 The quantifier -o-o-se

6.2.4.1 The meaning and morpho-syntactic structure

The quantifier **-o-o-se**, which can also be pronounced as **o-o-si** can be translated into English as ‘any’. Morphologically, the quantifier **-o-o-se** is formed by an agreement prefix of the noun it modifies, and a quantifier stem **-o** which is duplicated and affixed to the stem **-se**. It modifies both count and non-count nouns in their singular and plural forms. It has the meaning of ‘any’. The indefinite quantifier **-o-o-se** does not permit the Determiner pre-prefix, even when it occurs with a phonologically empty head, i.e. a *pro* head. Consider table 19 below:

Table 19: The morphological structure of the quantifier -o-o-si

Noun class	Morphology	Example	Gloss
1 -mu-	u-ó-u-si	umuntu wowosi	'any person'
2 -ba-	ba-ó-ba-ó-si	abantu bobosi	'any people'
3 -mu-	u-o-u-o-si	umwagi wowosi	'any sugarcane'
4 -mi-	i-o-i-o-si	imyagi yoyosi	'any sugarcanes'
5 -ri-	ri-o-ri-o-si	idyinyo dyodyosi	'any tooth'
6 -ma-	i-o-i-o-si	amenyo yoyosi	'any teeth'
7 -ki-	ki-o-ki-si	ikitebe chochosi	'any chair'
8 -bi-	bi-o-bi-o-si	ibitabo vyovyosi	'any chairs'
9 -N-	i-o-i-o-si	inzu yoyosi	'any house'
10 -N-	zi-o-zi-o-si	inzu zozosi	'any houses'
11 -ru-	ru-o-ru-o-si	uruswa gwogwosi	'any termite'
12 -ka-	ka-o-ka-o-si	agahene kokosi	'any small goat'
13 -tu-	tu-o-tu-o-si	uduhene twotwosi	'any small goats'
14 -bu-	bu-o-bu-o-si	ubwanwa bobosi	'any beards'
15 -ku-	ku-o-ku-o-si	ukuguru kwokwosi	'any leg'
16 -ha-	ha-o-ha-o-si	ahantu hohosi	'any place'
17 -ku-	-	-	-
18 -mu-	-	-	-
23 i-	-	-	-

Syntactically, the indefinite quantifier **-o-o-se** usually follows the lexical head noun. It may also occur without a lexical head noun, i.e. a *pro* head, representing a sentence in the discourse context where the referent is familiar to the interlocutors. However, it may also precede the head noun although this is considered stylistic. In terms of the generative approach assumed in this study, any nominal modifier occurring without a full-fledged lexical head noun has a *pro* head, containing phi-features (person, number, and gender) of the phonologically empty noun. Consider the following examples:

- (16) a. Genda uigure umuswaki **wowose**.

Ø-gend-a u- gur-e u-mu-swaki u- o- u- o- se
 2SG-go-FV 2SG-buy-SBJV Ppfx-3-brush 3-QUANTrt-3-QUANTrt any
 'Go to buy any toothbrush.'

- b. Speaker A: Ugomba nzane impene iyahe?

u- gomb-a n- zan- e i- N- pene i- i- a - he?
 2SG-want-FV 1SG-bring-SBJV Ppfx-9/10-goat Ppfx-9/10-GEN-Q.which
 'Which goat I bring?'

Speaker B: Zana **yoyose**.

Ø - zan- a i- o- i- o - se
 2SG-bring-FV 9-QUANTrt 9-QUANTrt-any
 'Bring anyone.'

Regarding the (in)definiteness and (non-)specificity reference, the DP dominating the indefinite quantifier **-o-o-se** is interpreted as having a feature of indefiniteness and non-specificity. For example, the utterance in (16a) entails that the speaker is sending the hearer to go to buy any toothbrush that (s)he will find in the shop. In this regard, the speaker has no specific kind of toothbrush in mind. Furthermore, there is no discourse context provided in (16a) that may yield a definite or specific reading.

No semantic feature of definiteness is expressed, even in the context where the indefinite quantifier **-o-o-se** occurs without a lexical head noun. In most cases, the intended referent is not identifiable from the previous discourse. In (16b), for instance, Speaker B does not have in mind any particular kind of ‘goat’ s/he wants. Thus, in (16b), the indefinite quantifier **yoyose** ‘any (goat)’ is used because there is no particular goat assumed to be known by both Speaker A and Speaker B which is expressed by the quantifier **yoyose**.

6.2.4.2 The co-occurrence of the quantifier o-o-se and other nominal modifiers with the semantic feature of definiteness

The quantifier **-o-o-se** cannot co-occur with a nominal modifier that possesses a semantic feature of definiteness like the demonstrative and/or anaphoric determiners, i.e., **-áá**, **áá-ndi**, or **nya-**. Furthermore, the quantifier **-o-o-se** cannot co-occur with the Determiner pre-prefix, even when it appears without an explicit lexical head noun, hence it has no semantic feature of specificity and it lacks the information structural contrastive focus reading.

6.2.4.3 The co-occurrence of the quantifier o-o-se and nominal modifiers with a neutral feature regarding (in)definiteness

The adjective, the possessive, the numeral, or the clausal relative are viewed in this study to possess an intrinsic neutral feature regarding (in)definiteness and (non-)specificity. The quantifier **-o-o-se** can co-occur with these nominal modifiers. In this co-occurrence combination, the quantifier **-o-o-se** occupies the position before the other nominal modifiers. With this co-occurrence, each nominal modifier that possesses a neutral feature concerning (in)definiteness takes an optional Determiner pre-prefix for discourse-pragmatic purposes, as exemplified by the co-occurrence of the quantifier **-o-o-se** with the genitive (16a), and with the numeral (16b) below:

(17) a. **Imbuto zozose (i)z'urubere** zirameze.

i - n - buto zi - o - zi - o - se
Ppfx-10-seed 10-QUANTrt-10-QUANTrt-any

(i) - zi - a u -ru-bere zi- ra - mer - e
(Ppfx)-10-GEN Ppfx-11-millet AgrS-PRES-germinate-PERF

b. Umwigisha agomba **ibihori vyovyose (i)bitandatu muri ibi bidudu.**

u-mu-igisha a - gomb-a i - bi-hori bi - o - bi - o - se
Ppfx-1-teacher AgrS-want-PRES Ppfx-8-grasshopper 8-QUANTrt-8-QUANTrt-any

(i) - bi-tandatu mu - ri i - bi - Ø bi-dudu
(Ppfx)-8-six 18LOC-be Ppfx-8-PROX 8-insect
'A/the teacher wants any (specifically) six grasshoppers among these insects.'

As it has been argued previously in this study, the occurrence of the Determiner pre-prefix is related to the discourse-pragmatic features of specificity and contrastive focus. Thus, the DP containing the quantifier **-o-o-se** and a genitive with a Determiner pre-prefix in its inflection morphology, as in (17a), is interpreted as realizing the features of specificity and contrastive focus. The occurrence of the Determiner pre-prefix yields the reading for the hearer to draw attention to the particular millet's seeds from other alternative seeds available in the discourse context. In the context of the utterance in (17a), the alternative seeds are implicitly known by the speaker and the hearer. Similarly, the Determiner pre-prefix in the inflection of the numeral modifier in (17b) encodes the features of specificity and contrastive focus. In this utterance, the hearer identifies the specific six grasshoppers among other alternative insects which are explicitly mentioned in the utterance (see Repp's (2016) proposals of explicit alternatives). Similarly, to other nominal modifiers, I posit that the Determiner pre-prefix in numeral nominal modifier is a functional category, Determiner predicative (D_{Pred}) which heads a DP predication construction including a Numeral Phrase.

6.2.5 The quantifier **-sa**

6.2.5.1 Meaning and morpho-syntactic structure

The quantifier **-sa** is used in a DP nominal expression with the meaning 'only'. It bears an intrinsic feature of definiteness in terms of the inclusiveness notion (Lyons, 1999). The feature of specificity is general in the sense that its semantic interpretation depends on the discourse context of use. The morphological form of the quantifier **-sa** contains the agreement prefix

corresponding to the lexical head noun it modifies and the quantifier stem **-sa**. There is no context where the inflectional morphology of the quantifier **-sa** may permit the Determiner pre-prefix. Table 20 illustrates the forms with the various noun classes:

Table 20: The morphological structure of the quantifier -sa

Noun class	Structure	Examples	Gloss
1 -mu-	mu-sa	umuntu musa	‘only the person’
2 -ba-	ba-sa	abantu basa	‘only the kings’
3 -mu-	u-sa	umusora wusa	‘only the pumpkin’
4 -mi-	mi-sa	imisora misa	‘only the pumpkins’
5 -ri-/ó	ri-sa	idyiso risa	‘only the eye’
6 -ma-	i-sa	amaso yasa	‘only the eyes’
7 -ki-	ki-sa	igitoke gisa	‘only the banana’
8 -bi-	bi-sa	ibitoke bisa	‘only the banana’
9 -N-	i-sa	inzu yisa	‘only the house’
10 -N-	zi-sa	inzu zisa	‘only the houses’
11 -ru-	ru-sa	urugo rusa	‘only the fence/ fences’
12 -ga-	ga-sa	agakoko gasa	‘only the house’
13 -tu-	tu-sa	udukoko dusa	‘only the hens’
14 -bu-	bu-sa	ubwari bhusa	‘only rice’
15 -ku-	ku-sa	ukurimba gusa	‘only the singing’
16 -ha-	ha-sa	ahantu hasa	‘only the place’
17 -ku-	ku-sa	kukuguru gusa	‘only on the leg’
18 -mu-	mu-sa	munzu musa	‘only in the house’
23 -i-	i-sa	iKepu Tawuni yisa	‘only Cape Town’

Syntactically, the quantifier **-sa** usually follows the lexical head noun it modifies (18a). The quantifier **-sa** cannot occur in the position before the lexical head noun in any context, as illustrated by the ungrammatical and unacceptable example in (18b). However, in exceptional instances, especially in rhetorical questions, the quantifier **-sa** may occur without the full lexical head noun, hence a *pro* head, as in (18d):

- (18) a. Munzu murimo ikirago **gisa**.
 mu - n - zu mu-ri- mo i- ki-rago ki-sa
 18LOC-9-house AgrS-be-18CL Ppfx-7-mattress 7-only
 ‘I found only the mattress.’
- b. *Umwigisha agomba **bisa ibitabo**.
 u-mu-igisha a - gomb-a bi-sa i - bi-tabo
 Ppfx-1-teacher AgrS-want-FV 8-only Ppfx-8-book
 ‘I want only those who love me.’

c. Mwiporo murimo **ibikoko bisa.**

mu - iporo mu - ri-mo i -bi-koko bi-sa
 18LOC-bush 18LOC-be-18.CL Ppfx-2-animal 2-only
 ‘In the bush, there are animals only.’

d. Speaker A: Reeba abaana, habagura umweenda wumwe.

∅ - reeb-a a - ba-aana ha - ba-gur-a u -mu-eenda u-mwe
 2SG-look-FV Ppfx-2-child PROG-2-buy-FV Ppfx-3-cloth 3-one
 ‘Look at the children, they are buying one cloth.’

Speaker B: **Wusa?**

u-sa
 3-only
 ‘Only?’

Regarding its semantic interpretation, the quantifier **-sa** has an intrinsic feature of definiteness in terms of the inclusiveness notion of Lyons (1999). On the other hand, the *igiHa* DP containing the modifier **-sa** may also be specific depending on the context of use. For instance, in (18a), the DP is definite and specific since the reading obtains that the speaker is talking of **ikirago** ‘mattress’ which can be uniquely identified by the hearer in the context. By contrast, the one in (18c) is definite and non-specific since the speaker does not have in mind the specific animal that is in the bush. The speaker does not have the specific animal in mind which might be in the bush, rather s/he just assumes that there are animals. Therefore, DP nominal expressions containing the quantifier **-sa** are interpreted as having a reading of definiteness through Lyons’s (1999) inclusiveness notion, whereas the feature of specificity depends on the context, i.e., [+definiteness, +/-specificity].

6.2.5.2 The co-occurrence of the quantifier **-sa** and other nominal modifiers with the semantic feature of definiteness

The quantifier **-sa** can co-occur with other modifiers that have the semantic feature of definiteness, including the demonstrative, and the anaphoric determiners i.e., **-áá**, **-áá-ndi**, and **nya-**. In this co-occurrence combination, the quantifier **-sa** usually follows the demonstrative or the anaphoric determiners. However, the anaphoric determiner **-áá** occurs in its canonical pre-nominal position and the anaphoric **nya-** occurs as a prefix (or clitic) of the lexical head noun. The following examples illustrate the co-occurrence of the quantifier **-sa** with the anaphoric determiner **-áá-ndi** in (19a) and the anaphoric determiner **-áá**.

(19) a. Umuraazi aroogenda na **cháá (i)gitabo gisa.**

u-mu-raazi a - roo-gend-a na ki-áá ki-tabo ki-sa
 Ppfx-1-visitor AgrS-FUT-go-FV ASS 7-DET 7-book 7-only
 ‘A/the visitor will go with the other (specific) book only.’

b. Rugema hayarima **umurima wawundi wusa.**

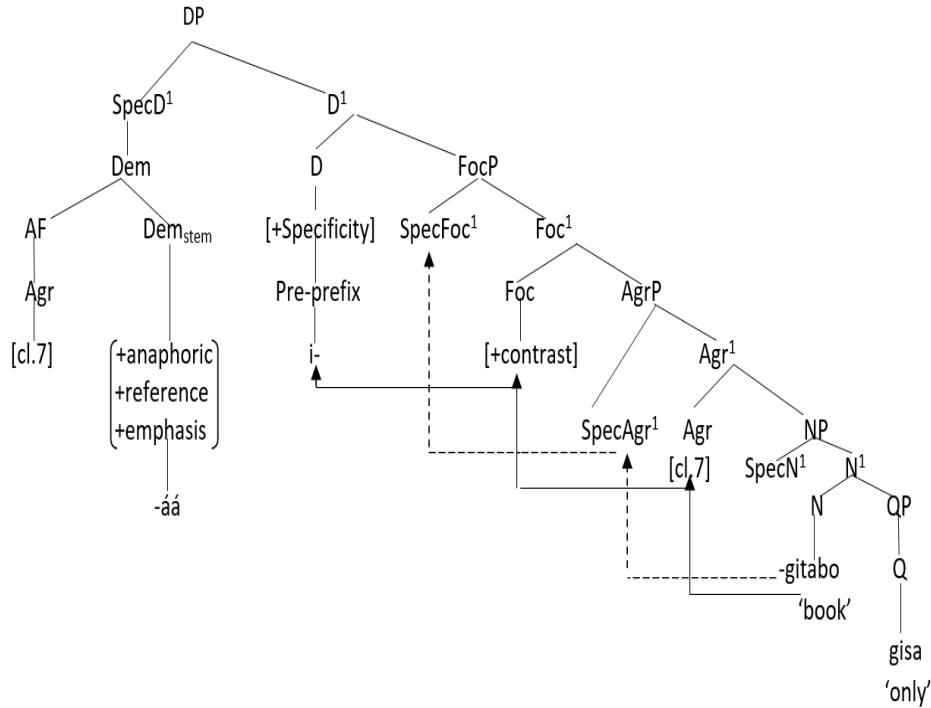
Rugema ha - ya-rim-a u - mu-rim-a u - áá -u-ndi u-sa
 Pn.Rugema PROG-AgrS-dig-FV Ppfx-3-farm-FV 3-DET-3-other 3-only
 ‘Rugema is digging the other farm only.’

The co-occurrence of **-sa** with nominal modifiers that have features of definiteness and specificity renders the DP subject to express features of definiteness and specificity. Anaphoric determiners refer to referents that are familiar to the interlocutors, which are possibly already established in the discourse. The occurrence of the Determiner pre-prefix in the inflection of the lexical head noun with the pre-nominal anaphoric determiner in (19a) is associated with the reading of additional specificity and the information structural feature of contrastive focus. In this regard, the occurrence of the Determiner pre-prefix indicates to the hearer to pay attention to the specific book, among other implicit alternative books in the discourse context. The interpretative features of the DP outlined in (19a) can be represented in a Phrase structure as follows:

(20) The Phrase Structure of the DP object [cháá (i)gitabo gisa] in igiHa Sentence:

Umuraazi aroogenda na **cháá (i)gitabo gisa.**

‘A/the visitor will go with the other (specific) book only.’



As has been demonstrated for other DPs containing the Focus Phrase in this study, the focused constituent [**igitabo**] ‘the specific book’ in the tree diagram above moves successive cyclically to the SpecFoc¹ position, where it then occurs in a Specifier-head relation with the Focus head, a relation similar to the relation of the Spec-head agreement. Thus, the relation between the focused constituent and the Focus head is viewed as being a Focus agreement relation in DP, analogous to that in the clausal structure proposed by Mursell (2016).

6.2.5.3 The co-occurrence of the quantifier **-sa** and other nominal modifiers with a neutral semantic feature of (in)definiteness

The quantifier **-sa**, like other quantifiers, can co-occur with other nominal modifiers that have a neutral feature concerning (in)definiteness. In this co-occurrence combination, the quantifier **-sa** follows the other nominal modifiers with a neutral feature of (in)definiteness. Every nominal modifier that possesses a neutral feature of (in)definiteness in this co-occurrence can exhibit a Determiner pre-prefix. The co-occurrence of the quantifier **-sa** and the adjective in (21a) and the numeral (21b) illustrate these properties.

- (21) a. **Umwuungu (u)wubisi wusa** wuradandajwe.
 u-mu-ungu (u) - u-bisi u-sa u - ra -dandaz -w - e
 Ppfx-3-pumpkin (Ppfx)-3-raw 3-only AgrS-PRES- sell -PASS-PERF
 ‘(Specifically) the raw pumpkin only was sold.’

b. Habateka **amahaha (a)yabiri yasa.**

ha - ba - tek - a a - ma-haha (a)-ya-biri ya-sa
 PROG-2SG-cook-FV Ppfx-6-lung (Ppfx)-6-two 6-sa
 ‘They are cooking (specifically) two lungs only.’

The occurrence of the Determiner pre-prefix in the inflection of the adjective **(u)wubisi** ‘(specifically) raw’ in (21a) and the numeral **(a)yabiri** ‘(specifically) two’ in (21b) realize the semantic features of specificity and contrastive focus, syntactically represented as a functional category, Determiner predicate that dominates the Focus Phrase and DP predication projection, representing the restrictive reading of the modifier.

It was pointed out in (6.3.1.1) that the quantifier **-sa** cannot regularly occur without a lexical head noun, like other nominal modifiers, unless it occurs in a rhetorical question, as in (18d). However, the quantifier **-sa** can regularly occur with nominal modifiers such as the demonstrative, the adjective, the possessive, the numeral, or the clausal relative without the lexical head noun. In this discourse-pragmatic context, the referent is known, through common ground knowledge, by the speaker and hearer. The following example conversation illustrates these properties:

(22) a. Speaker A: Uboonye abaana bangahe aho?

u - boon-e a - ba-aana ba-ngahe a - ha - o
 Ppfx-see-PERF Ppfx-2-child 2-Q.how much DEMrt-16-MEDIAL
 ‘How many children have you seen there?’

Speaker B: Mboonye **abatandatu basa.**

n - boon-e a - ba-tandatu ba-sa
 1SG-see-PERF Ppfx-2-six 2-only
 ‘I have seen specifically six only.’

b. Speaker A: Uguze ibitunguru ivyaahe?

u - gur - e i - bi-tunguru i -bi - a - he
 2SG-buy-PERF Ppfx-8-onion Ppfx-8-NEG-Q.which
 ‘Which books have you bought?’

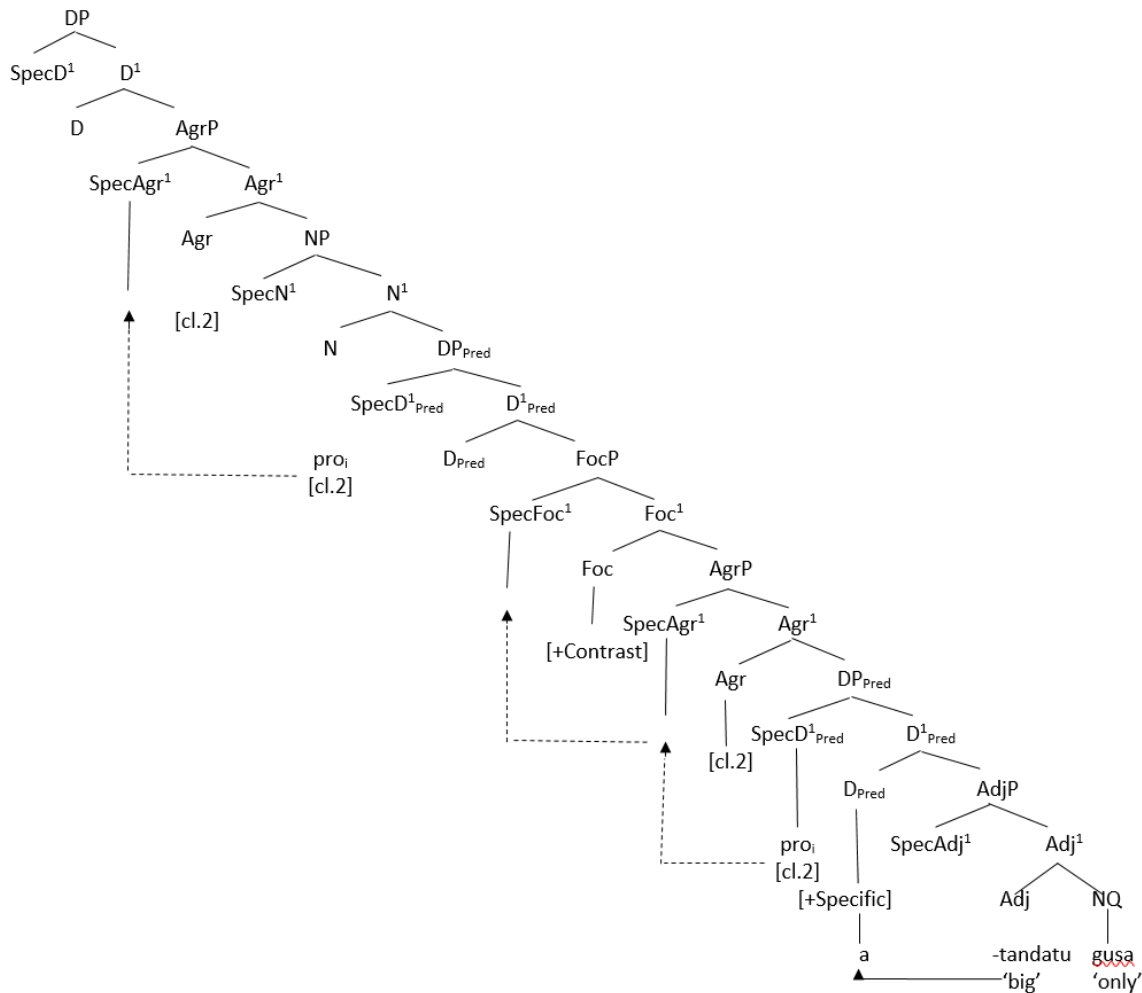
Speaker B: Nguze **ibi bisa.**

n - gur - e i - bi - Ø bi-sa
 1SG-buy-PERF DEMrt-8-PROX 8-only
 ‘I have bought these only.’

In this context, nominal modifiers that are inherently neutral regarding the semantic feature of (in)definiteness, like the numeral in Speaker B’s utterance in (22a), realize an obligatory

Determiner pre-prefix. The occurrence of the Determiner pre-prefix is associated with the reading of specificity and contrastive focus in the sense in the above example that the hearer can identify specifically six children, among other implicitly known children, who are not mentioned explicitly in the utterance. As stated before, I argue that the Determiner pre-prefix in the inflection of the numeral in (22a) is a functional category, Determiner predicate (D_{Pred}) that dominates the Focus Phrase and introduces a DP predication structure, as demonstrated in the following Phrase Structure:

- (23) The Phrase structure of the DP [abatandatu basa]
 Mboonye **abatandatu basa**.
 ‘How many children have you seen there?’



6.3 The enumerative

There are several qualificatives in igiHa that exhibit semantic features of numbers in the sense that they express some form of enumeration. The morphology of these elements comprises a concordial prefix and the enumerative stem.

6.3.1 The enumerative -enshi

6.3.1.1 Morpho-syntactic structure of the enumerative -enshi

The enumerative **-enshi** expresses the semantic features of indefiniteness and non-specificity. It can be translated into English as ‘many/a lot/much’. The enumerative **-enshi** is formed by an agreement prefix corresponding to the noun class prefix of the lexical head noun it modifies which is affixed to the enumerative stem **-enshi**. Canonically, the enumerative **-enshi** occurs without the determiner pre-prefix as in (24a), and its morphology cannot exhibit the determiner prefix, hence the unacceptability of (24b-c):

- (24) a. **Utwaana twenshi** turakina umupira mu kibuga.
 u - tu-aana tu-enshi tu - ra - kin - a u-mu-pira mu ki-buga
 Ppfx-12-child 12-many AgrS-PRES-play-FV Ppfx-3-ball 18LOC 7-field
 ‘Many kids play soccer on the field.’
- b. *Umwaana arabaanye **amaraso amenshi**.
 u-mu-aana a - ra - baan - e a - ma-raso a-ma-enshi
 Ppfx-1-child AgrS-PRES-have-PERF Ppfx-6-blood Ppfx-6-a lot
 ‘The child has a lot of blood.’
- c. Speaker A: Umukobwa hayagura amapapayo yangahe?
 u-mu-kobwa ha - ya - gur-a a-ma-papayo ya-ngahe
 Ppfx-1-girl PROG-AgrS-buy-FV Ppfx-6-pawpaw 6-Q.how many
 ‘The girl is buying how many pawpaws?’
- Speaker B: *Umukobwa aravoma **amenshi**.
 u-mu-kobwa a - ra - vom-a a-ma-enshi
 Ppfx-3-girl AgrS-PRES-fetch-FV Ppfx-6- a lot
 ‘The/a girl fetches a lot of (something).’

The enumerative **-enshi** occurs obligatorily with plural and mass nouns, but never co-occurs with singular nouns, hence the unacceptability of the example in (25) below:

- (25) *Umukinyi arookazana **umupira mwenshi**.
 u - mu-kinyi a - roo - ka - zan - a u - mu-pira mu-enshi
 Ppfx-3-player AgrS-FUT-PRSTV-bring-FV Ppfx-3-ball 3-many
 ‘*The player will bring many balls.’

The enumerative **-enshi** canonically occurs after the lexical head noun it modifies, i.e. post-nominally. Stylistically, it can, however, occur in the pre-nominal position, resulting in the lexical head noun being preceded by a suprasegmental pause. The enumerative **-enshi** can also modify a phonologically empty noun, i.e., a *pro* head. Consider the following examples.

- (26) a. Ku musozi kuramera **ibiti vyenshi**.
 ku mu-sozi ku - ra - mer - a i - bi-ti bi-enshi
 17LOC 3-mount 17-PRES-germinate-FV Ppfx-8-ti 8-many
 ‘On the mount there germinate many trees.’
- b. **Vyenshi, ibiti** biramera ku mufereeke.
 bi-enshi i - bi - ti bi - ra - mer - a ku mu-fereeke
 8-many Ppfx-8-tree AgrS-PRES-germinate-FV 17LC 3-trench
 ‘Many trees germinate at the trench.’
- d. Umuhari wanje atera ibiti aha. **Vyenshi** bimera mu mvura.
 u - mu-hari u - a - nje a - ter - a i - bi-ti a - ha- Ø
 Ppfx-3-friend 3-GEN-me AgrS-grow-FV Ppfx-8-tree DEMrt-16-PROX
 bi-enshi bi - mer - a mu n-vura
 8-many 8-germinate-FV 18LC 10-rain
 ‘My friend grows trees here. Many germinate during the rain.’

Concerning the semantic features of the enumerative **-enshi**, in the above examples, it denotes an undisclosed large amount of referents. For instance, in the context of the utterances in (26), the enumerative **vyenshi** ‘many’ yields for the referent **ibiti** ‘trees’ the semantic interpretations of indefiniteness and non-specificity, since there are no specific identifiable (number of) trees identified. Thus, the hearer cannot specifically identify the referent from the morphology and semantics of the enumerative **-enshi**. In addition, the absence of the Determiner pre-prefix in the inflection of the enumerative **-enshi** encodes to the referent a non-focus reading. As stated previously, I posit that the occurrence of the Determiner pre-prefix is associated with the semantic feature of specificity and the information structural feature of contrastive focus, especially for modifiers with an intrinsic neutral semantic feature of (in)definiteness and (non-)specificity, i.e., the adjective, the possessive, the numeral, and the clausal relative. Therefore,

the non-occurrence of the determiner pre-prefix in the inflection of the enumerative **-enshi** in example (26) encodes the reading that there is no focus realized on the referent.

Where the enumerative **-enshi** precedes the lexical head noun, it does not exhibit the determiner pre-prefix. The reading regarding the non-occurrence of the determiner pre-prefix in the inflection of the enumerative that occurs before its lexical head noun is similar to when it occurs after the lexical head noun. However, due to the appearance of a prosodic pause in the former case, the lexical head noun realizes a definiteness interpretation. The prosodic pause indicates the lexical head (referent) is expressed as an afterthought. This indicates that the referent is presumed to be familiar to the interlocutors. Furthermore, the prosodic pause introduces additional emphasis (focus) to the lexical head noun.

6.3.1.2 The co-occurrence of the enumerative **-enshi** with the emphatic pronoun

This sub-section explores the co-occurrence of the indefinite enumerative **-enshi** with the emphatic pronoun which inherently encodes the feature of definiteness. Consider the examples in (27):

- (27) a. **Ubweenge bwenshi nibwo** bugombwa hano.
 u - bu-eeinke bu-enshi ni - bu-o bu - gomb - w - a Ø - ha - no
 Ppfx-14-brain 14-much LDCop-14-MEDIAL AgrS-need-PASS-FV DEMrt-16-MEDIAL
 ‘It is much brain that is needed here.’
- b. ***Ubweenge (u)bwenshi nibwo** bugombwa hano.

In the examples provided in (27) it appears that the indefinite enumerative **-enshi** does not require a Determiner pre-prefix in its inflection when it occurs with the definite emphatic pronoun, hence the unacceptability of the construction in (27b). For more descriptive facts, one may consider the co-occurrence of the enumerative **-enshi** with the demonstrative, which is definite bearing modifier in *igiHa*:

- (28) a. **Aba abaana benshi** baramenya kuroba inswi.
 a - ba - Ø a -ba-aana ba-enshi ba - ra - meny-a ku-rob- a i - n-swi
 DEMrt-2-PROX Ppfx-2-child 2-many AgrS-PRES-know-FV INF-fish-FV Ppfx-10-fish
 Lit: These many specifically know to fish fish.
 ‘These many specifically children know to fish.’

- b. ***Aba abaana (a)benshi** baramenya kuroba inswi.
 a - ba - Ø a -ba-aana (a)- ba-enshi ba - ra - meny-a ku-rob- a i - n-swi
 DEMrt-2-PROX Ppfx-2-child (Ppfx)-2-many AgrS-PRES-know-FV INF-fish-FV Ppfx-10-fish
 Lit: These many specifically knows to fish fish.
 ‘These many specifically children know to fish.’

Similarly, the enumerative **-enshi** does not exhibit the determiner pre-prefix when it occurs with a demonstrative. In this regard, the occurrence of the inherently definite demonstrative expresses the reading of the definite set of children as a whole.

The non-occurrence of the determiner pre-prefix in the inflection of the enumerative **-enshi** encodes the reading for the above example that an indefinite number of the children remain the identifiable group. In this regard, I propose that the co-occurrence of the indefinite enumerative **-enshi** and the definite modifier expresses the reading that the referent is definite but non-specific.

6.3.1.3 The co-occurrence of the enumerative **-enshi** and other nominal modifiers with the semantic feature of definiteness

The enumerative **-enshi** can co-occur with other nominal modifiers that express the semantic feature of definiteness, such as the demonstrative and anaphoric determiners. In this co-occurrence, the demonstrative can occupy the post-nominal or the pre-nominal position. The lexical head noun exhibits an optional pre-prefix when the demonstrative occupies the pre-nominal position. The co-occurrence of the enumerative **-enshi** and the anaphoric determiner **-áá** permits the lexical head noun to exhibit its Determiner pre-prefix optionally as illustrated in the following examples:

- (29) a. Ndabishima **bino (i)bigano vyenshi**.
 n - ra - bi-shim-a Ø - bi - no (i) - bi-gano bi-enshi
 2SG-PRES-OM-like-FV DEMrt-8-MEDIAL (Ppfx)-8-story 8-many
 ‘I like these many (specifically) stories.’
- b. **Wáá (u)mugoz**i wurakatuse.
 u-áá (u) - mu-gozi u - ra -katuk-e
 3-DET (Ppfx)-3-rope AgrS-PRES-cut-PERF
 ‘The other rope is cut.’

Given that the demonstrative and the anaphoric determiners are argued in this study to be inherently definite and specific, the occurrence of the Determiner pre-prefix in the inflection of the lexical head noun introduces more emphasis which is interpreted as having an additional feature of specificity and the information structural feature of contrastive focus.

6.3.1.4 The co-occurrence of the enumerative **-enshi** and other nominal modifiers with the semantic feature of definiteness

The enumerative **-enshi** can also occur with other nominal modifiers, including the numeral, the clausal relative, the adjective, and the possessive which are inherently neutral regarding the semantic properties of (in)definiteness and (non-)specificity. However, the enumerative **-enshi** cannot co-occur with a numeral nominal modifier, hence the unacceptability of (30b). Concerning this property nominal modifiers that have the semantic feature of neutral can exhibit the Determiner pre-prefix which I argue to host the semantic feature of specificity, and the information structural feature of contrastive focus. Consider the co-occurrence of the enumerative **-enshi** and the adjective in the following example:

- (30) a. Ndoogenda kurora **inzeeba zenshi (i)zikiyunguyungu**.
 n - roo - gend-a ku - ror-a i - n - zeeba zi-enshi (i) - zi-kiyunguyungu
 2SG-FUT-gend-FV INF-see-FV Ppfx-9/10-bird 10-many (Ppfx)-10-blue
 ‘I will go to see many (specifically) blue birds.’
- b. *Ndoogenda kurora **inzeeba zenshi (i)zibiri**.
 n - roo - gend-a ku - ror-a i - n - zeeba zi-enshi (i) - zi-biri
 2SG-FUT-gend-FV INF-see-FV Ppfx-9/10-bird 10-many (Ppfx)-10-two
 ‘I will go to see many (specifically) many two birds.’

The co-occurrence of the Determiner pre-prefix in the inflection of the adjective in (30a) encodes the semantic feature of specificity and the information structural feature of contrastive focus. The contrastive focus is encoded in the sense that the reading is yielded by the Determiner pre-prefix to make the hearer call attention to the particular blue birds among other implicit alternative birds that are available in the discourse context. The utterance in (30b) is unacceptable because the meaning of the enumerative **zenshi** ‘many’ is incompatible with the numeral.

6.3.2 The enumerative **-mwe**

6.3.2.1 Morpho-syntactic structure of the enumerative **-mwe**

The enumerative **-mwé** can be translated into English as ‘some’. Its meaning in English may be extended to ‘the same/similar’ and/or ‘certain’. In this study, I view the enumerative **-mwe** as an indefinite element in terms of its semantic meaning which lacks an inclusiveness notion. The enumerative **-mwe** is formed by an optional Determiner pre-prefix, an agreement prefix corresponding to the noun class prefix of the lexical head noun, and the enumerative stem **-mwe**.

The Determiner pre-prefix occurs optionally in the inflection of the enumerative **-mwe** for realizing certain pragmatic meaning purposes (see table 21):

Table 21: The morphological structure of the enumerative -mwe

CL	Agr	Structure	Example	Gloss
1	-u-	u-mwe	umwaana wumwe	'a certain/one child'
2	-ba-	ba-mwe	abaana bamwe	'some children'
3	-u-	u-mwe	umwagi wumwe	'a certain/one sugarcane'
4	-i-	i-mwe	imyagi yimwe	'some sugarcanes'
5	-ri-	ri-mwe	idyinyo rimwe	'a certain/one tooth'
6	-ya-	ya-mwe	amenyo yamwe	'some teeth'
7	-ki-	ki-mwe	ikitebe kimwe	'a certain/one chair'
8	-bi-	bi-mwe	ibitabo bimwe	'some chairs'
9	-i-	i-mwe	inzu yimwe	'any house'
10	-zi-	zi-mwe	inzu zimwe	'any houses'
11	-ru-	ru-mwe	urugeendo rumwe	'the same/one trip'
12	-ka-	ka-mwe	agahene kamwe	'a certain/one small goat'
13	-tu-	tu-mwe	uduhene tumwe	'some small goats'
14	-bu-	bu-mwe	ubwanwa bumwe	'some beards'
15	-ku-	ku-mwe	ugutwi kumwe	'a certain/one ear'
16	-ha-	ha-mwe	ahantu hamwe	'a certain place'
17	-ku-	-	-	-
18	-mu-	-	-	-
23	i-	-	-	-

The table above shows that the enumerative stem **-mwe** is incompatible with the agreement prefixes for the locative classes 17, 18, and 23. In this regard, the enumerative **hamwe** for locative 16 extends to the rest of the locative classes. In addition, the indefinite enumerative stem **-mwe** can be reduplicated to form the enumerative with an extended meaning of the 'one by one' or 'one after another', as illustrated in the following conversations:

(31) Speaker A: Hodi umwo munzu!

hodi u - mu - o mu - N - nzu
hallo DEMrt-18-PROX 18LOC-9/10-house
'Greetings in that house.'

Speaker B: Turashashe. Muri bangahe iyo?

tu- ra- shash- e. mu-ri ba-ngahe i - i - o
1PL-PRES-welcome-PERF 2PL-be 2Agr-Q.how many DEMrt-3-PROX
'Welcome. How many are you there?'

Speaker A: Tur'abantu batandatu.

tu-ri a-ba-ntu ba-tandatu
1PL-be Ppfx-2-person 2-six
'We are six persons.'

Speaker B: Haya. Yinjire umuntu **wumwewumwe**
 haya. i - injir- e u- mu-ntu u-mwe-u-mwe
 Ok. 3SG-enter-SBJV Ppfx-1-person 1 - one-1-one
 ‘Ok. Enter one after another.’

Syntactically, the enumerative **-mwe** canonically occurs after the lexical head noun it modifies. However, for realizing some pragmatic meaning purposes, it can occasionally occur pre-nominally with an obligatory determiner pre-prefix to provide extra emphasis. Furthermore, it can occur without an explicit lexical head noun in a discourse context in which the referent has already been mentioned. Consider the examples in (32a-c) below.

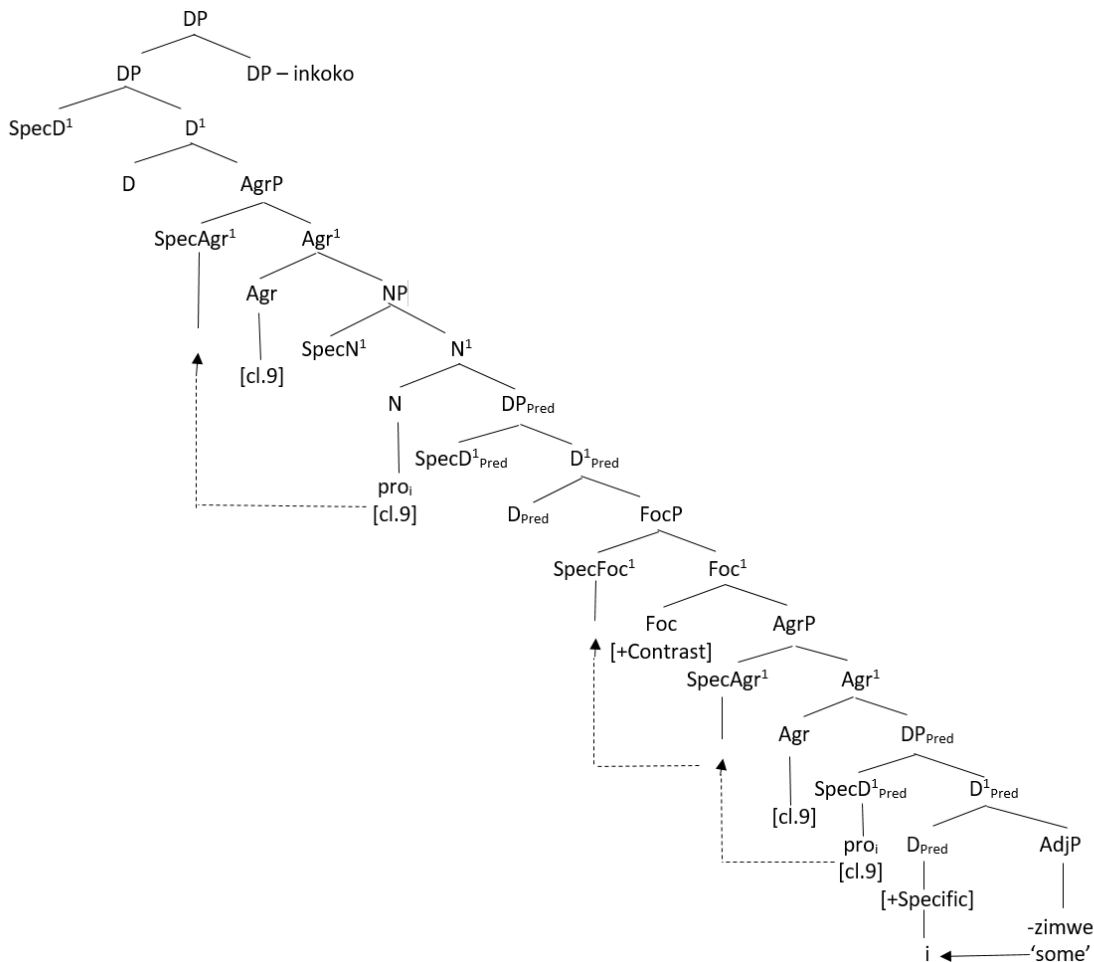
- (32) a. Umwaana agomba **inkonko (i)yimwe**.
 u -mu-aana a - gomb-a i- N - koko (i) - i-mwe
 Ppfx-1-child AgrS-want-PRES Ppfx-9/10-hen (Ppfx)-9-certain
 ‘The/a child wants (specifically) the certain hen.’
- b. **Izimwe, inkoko** ziroodandazwa.
 i - zi-mwe i - n - koko zi - roo - ka - dandaz-w - a
 Ppfx-10-some Ppfx-9/10-hen AgrS-FUT-PRSTV-sell- PASS-FV
 ‘Some hens will be sold.’
- c. Speaker A: Ibitabo vyanje wabitwaaye hehe?
 i - bi-tabo bi- nje u- a- bi-twaar-e ha - he
 Ppfx-8-book Agr-me 2SG-PAST-8-take-PERF 16LOC-Q. where
 ‘Where have you taken my books?’

Speaker B: **ibimwe** ndabitwaaye imubira ibindi ntwara kwishuri.
 bi-mwe n- ra- bi-twaar-ye i- mu-hira i -bi-ndi ku- i- shuri
 8-some 2SG-PRES-8-take-PERF Ppfx-3-home Ppfx-8-other LOC-Ppfx-home
 ‘I have taken some of them home and others to school.’

Regarding the semantic features of (in)definiteness and (non-)specificity, the enumerative **-mwe** intrinsically express features of indefiniteness and non-specificity. Thus, I view the referents in (32a-b) as indefinite in terms of lacking the inclusiveness notion. However, the realization of the optional occurrence of the Determiner pre-prefix in the inflection of the enumerative encodes a specificity and contrastive focus reading. Hence, the DP in both (32a) and (32b) is interpreted as indefinite, specific, and focus-bearing if the Determiner pre-prefix is realized. The enumerative **-mwe** takes an obligatory Determiner pre-prefix in the case where it appears without a lexical head noun, *pro* head. The existence of the Determiner pre-prefix in the inflection of the enumerative **-mwe** like in (32c) yields to the covert lexical head noun a specificity and focus

reading. In the discourse context, the covert lexical head noun has been established in the preceding utterance, hence it is familiar to the interlocutors. Thus, referent represented by a covert lexical head noun in (32c) has the features of definiteness, specificity, and contrastive focus. In addition, the occurrence of the Determiner pre-prefix on the inflection of the enumerative **-mwe** is structurally represented as the Determiner predicative (D_{Pred}). For instance, the obligatory occurrence of the Determiner pre-prefix on the inflection of the pre-nominal enumerative **-mwe** in (32b) followed by the prosodic pause encodes a restrictive and predicative interpretation, hence the DP predication structure representation. Following the interpretative features of the DP constituent [**izimwe, inkoko**] in (32b), its structural representation is as follows:

- (33) The Phrase Structure of the DP subject [**izimwe, inkoko**] in igiHa sentence:
Izimwe, inkoko ziroodandazwa.
 ‘Some hens will be sold.’



6.3.2.2 The co-occurrence of the enumerative **-mwe** and nominal modifiers with the semantic feature of definiteness

This subsection examines the co-occurrence of the enumerative **-mwe** with another nominal such as the demonstrative and anaphoric determiners. Given that the enumerative **-mwe** in *igiHa* is inherently indefinite and non-specific while the demonstrative and anaphoric determiners inherently possess features of definiteness and specificity, consider the following example:

(34) a. **Imbwa zimwe izo** ziradyana.

i - n - bwa zi-mwe i - zi - o zi - ra - ry- an - a
Ppfx-9/10-bwa 10-some DEMrt-10-PROX AgrS-PRES-eat-APPL-FV
'Some of those dogs bite each other.'

b. **Imbwa izo zimwe** ziradyana.

i - n - bwa i - zi - o zi-mwe zi - ra - ry- an - a
Ppfx-9/10-bwa DEMrt-10-PROX 10-some AgrS-PRES-bite-APPL-FV
'Some of those dogs bite each other.'

c. **Izo (i)mbwa zimwe** ziradyana.

i - zi - o i - n - bwa zi-mwe zi - ra - ry- an - a
DEMrt-10-PROX Ppfx-9/10-bwa 10-some AgrS-PRES-bite-APPL-FV
'Some of those dogs bite each other.'

Regarding the syntactic word order, in the co-occurrence combination of the enumerative **-mwe** and the demonstrative, it canonically occupies the pre-nominal position. In this position, the word order of the enumerative **-mwe** and the demonstrative is variable. Another possible word order of this co-occurrence combination is that the demonstrative may precede the lexical head noun while the enumerative **-mwe** appear in the position after the lexical head noun. In this word order, the enumerative **-mwe** must appear without a determiner pre-prefix.

The discourse-pragmatic interpretation of the referent in (34a-c) is definite and specific, as encoded by the occurrence of the demonstrative. In (34c), the lexical head noun which follows the pre-nominal demonstrative occurs with the determiner pre-prefix. This determiner pre-prefix encodes additional emphasis, yielding a focus reading to the DP referent.

6.3.2.3 The co-occurrence of the enumerative **-mwe** with other nominal modifiers inherently neutral regarding (in)definiteness and (non-)specificity

As for other enumeratives, the enumerative **-mwe** can co-occur with other nominal modifiers which are neutral concerning the semantic features of (in)definiteness and (non-)specificity. In

this regard, the enumerative **-mwe** can co-occur with the adjective, the numeral, the possessive, or the clausal relative. In this co-occurrence combination, the enumerative **-mwe** usually precedes the other nominal modifiers. Consider the following examples:

- (35) a. **Ibitabo bimwe (i)vyirabura** biratabuse.
 i - bi-tabo bi-mwe (i) - bi-irabura bi - ra - tabuk-e
 Ppfx-8-book 8-some (Ppfx)-8-black AgrS-PRES-tear-PERF
 ‘Some books are torn.’
- b. Urabonye **igitabo kimwe (i)ch’umwigisha?**
 u - ra -bon - e i - ki-tabo ki-mwe (i) - ki - a u - mu-igisha
 Ppfx-PRES-see-PERF Ppfx-7-book 7-mwe (Ppfx)-7-GEN Ppfx-1-teacher
 ‘Have you seen a certain book of the teacher?’
- c. **Ibitabo bimwe (i)bitandatu** biratabuse.
 i - bi-tabo bi-mwe i-bi-tandatu bi - ra - tabus-e
 Ppfx-8-book 8-some Ppfx-8-six AgrS-PRES-tear-PERF
 ‘Some six books are torn.’
- d. **Ibitabo bimwe (i)vyó urookagura** ni bisore.
 i - bi-tabo bi-mwe (i) - bi - ó u - roo - ka - gur - a ni bi-sore
 Ppfx-8-book 8-some (Ppfx)-8-REL AgrS-FUT-PRSTV-buy-FV COP 8-nice
 ‘Some books which you will buy are nice.’

In respect to the non-occurrence of the determiner, pre-prefix in the inflectional morphology of the adjective, the possessive, the numeral, and the clausal relative, the DP referent(s) in (35a-d) is(are) indefinite and non-specific. However, the presence of the optional Determiner pre-prefix encodes an interpretation that the speaker has particular referent(s) in mind. However, this does not mean that the hearer can identify the referent(s) being referred to by the speaker. The occurrence of the Determiner pre-prefix encodes the feature of specificity, but not definiteness to the referent.

6.3.3 The enumerative **-ndi**

6.3.3.1 Meaning and morpho-syntactic structure

The enumerative **-ndi** is a nominal modifier which has the English meaning of ‘another/other’. With the use of the enumerative **-ndi** in the igiHa nominal expression, other referents are excluded from the reference. The enumerative **-ndi** is formed by a Determiner pre-prefix and the

agreement prefix corresponding to the noun prefix of the lexical head noun. Table 22 presents the forms of the enumerative **-ndi** for the various noun classes.

Table 22: The morphological structure of the enumerative -ndi

Noun class	Structure	Example	Gloss
1 -mu-	u-u-ndi	umuhungu uwundi	‘another boy’
2 -ba-	a-ba-ndi	ubahungu abaandi	‘other boys’
3 -mu-	u-u-ndi	umugozi uwundi	‘another rope’
4 -mi-	i-i-ndi	imigozi iyindi	‘other ropes’
5 -ri/-ø-	i-ri-ndi	idyinyo irindi	‘another tooth’
6 -ma-	a-a-ndi	ameenyo ayaandi	‘other teeth’
7 -ki-	i-ki-ndi	igihe ikindi	‘another time’
8 -bi-	i-bi-ndi	ibihe ibindi	‘other times’
9 -n-	i-i-ndi	inzogera iyindi	‘another trumpet’
10 -n-	i-zi-ndi	inzogera izindi	‘other trumpets’
11 -ru-	u-ru-ndi	urubavu urundi	‘another rib’
12 -ka-	a-ka-ndi	akamotoka akandi	‘another small car’
13 -tu-	u-tu-ndi	utumotoka utundi	‘other small cars’
14 -bu-	u-bu-ndi	ubwaari ubundi	‘other rice’
15 -ku-	u-ku-ndi	ugutwi ukundi	‘another ear’
16 -ha-	a-ha-ndi	ahantu ahandi	‘another place’
17 -ku-	-	-	-
18 -mu-	-	-	-
23 -i-	-	-	-

Table 22 shows that there are no enumerative forms to modify nouns in the locative classes 17, 18, and 23. In this regard, the enumerative **ahandi** of the locative class 16 extends its use to the rest locative classes.

Regarding its syntactic position in the DP, the indefinite enumerative **-ndi** usually occupies the position after the lexical head noun. In this position, the indefinite enumerative **-ndi** must realize its Determiner pre-prefix. Furthermore, the Determiner pre-prefix of the lexical head noun is retained, as in (36a). However, this word order is not rigid, since the enumerative **-ndi** can also occupy the position before the lexical head noun. When it occurs in the pre-nominal position, the indefinite enumerative **-ndi** retains its Determiner pre-prefix whereas that of the lexical head noun is optional (36b).

- (36) a. Umwaami arookarongora **umugore uwundi**.
 u - mu-aami a - roo - ka - rongor-a u -mu-gore u -u -ndi
 Ppfx-1-chief AgrS-FUT-PRSTV-marry-FV Ppfx-1-wife PPfx-1- another
 ‘The chief will get married to another wife.’

- b. **Uwundi (u)musi** uroogasanga tugiiye kumurima.

u - u-ndi (u)-mu-si u - roo - ka - sang-a tu-geend-e ku - mu-rima
 Ppfx-3-QUANTrt-another (Ppfx)-3-day 2SG-FUT-PRSTV-find-FV 1PL-go-FV 17.LOC-3-farm
 ‘Another day you will find us gone to the farm.’

The examples (36a) illustrate that the indefinite enumerative **-ndi** modifies the lexical head noun **umugore** ‘wife’ in the post-nominal position. In the example in (36b), the indefinite enumerative **-ndi** occurs in the pre-nominal position. In this position, the Determiner pre-prefix of the lexical head noun occurs optionally. The optional occurrence of the Determiner pre-prefix in the inflection of the lexical head noun is associated with certain discourse-pragmatic readings, particularly additional emphasis and/or focus.

Regarding the discourse-pragmatic interpretations of a DP containing the enumerative modifier **-ndi**, I posit that the enumerative **-ndi** is inherently interpreted with the features of indefiniteness and non-specificity in the sense that it denotes non-identifiable and non-unique referents. The indefinite enumerative **-ndi** normally denotes the supplementary member(s) of an assumed set of entities already known by interlocutors in the discourse. In this regard, the additional member(s) which is/are intended to be referred to by the speaker are assumed to be unknown to the hearer. However, there are contexts where the indefinite enumerative **-ndi** is interpreted with a feature of definiteness. Consider the following examples:

(37) a. **Ibitebe ibindi** biravunise.

i - bi-tebe bi-ndi bi - ra - vunik-e
 Ppfx-8-chair Agr-other AgrS-PRES-break-PERF
 ‘Other chairs have broken.’

b. **Ikindi, (i)gitebe** biravunise.

zan - a i - ki - ndi i - ki-tebe
 bring-PRES Ppfx-Agr-another Ppfx-7-chair
 ‘Bring another chair.’

c. Speaker A: Munzu murimo ibitebe bikeeyi.

mu - n - zu mu - ri-mo i - bi-tebe bi-keeyi
 18LOC-9/10-house 18LOC-be-18CL Ppfx-8-chair 8-few
 ‘In the house, there are few chairs.’

Speaker B: Mpanzana **ibindi**.

N - ha - n - zan - a i -bi-ndi
 1SG-PROG-1SG-bring-FV Ppfx-8-QUANTrt-other
 ‘I am bringing the others.’

In the examples in (37a-c) the enumerative modifier **-ndi** exhibits an obligatory Determiner pre-prefix in all occurrences. Thus, in these examples, the assumption is that there are other chairs already broken and they are familiar to the interlocutors. In this regard, the enumerative **-ndi** refers to the entities which are not among those which are familiar. Therefore, the enumerative **-ndi**, is interpreted as [-definite, -specific. Through the occurrence of the optional Determiner pre-prefix of the lexical head noun that follows the enumerative **-ndi** in (37b), specificity is encoded. As has been argued previously in this study, the Determiner pre-prefix that occurs in the inflection of the lexical head noun that is preceded by a nominal modifier, as in (37b) encodes additional specificity and contrastive focus.

The enumerative **-ndi** has an anaphoric interpretation in the context where it appears without an overt lexical head noun, i.e., a *pro* category, like in (37c), where it refers to the already known referent. Bearing in mind that the occurrence of the enumerative **-ndi** in the context where the referent is familiar does not express a specificity reading, the DP containing the enumerative **-ndi** that appears without an overt lexical head noun, like that of (37c) encodes the features of [+definiteness, -specificity]. It is interpreted with a feature of definiteness because the referents **ibitebe** ‘chairs’ are familiar to the interlocutors, in terms of Lyons’ (1999) familiarity notion. On the other hand, it is non-specific since the speaker does not refer to specific entities.

6.3.3.2 The co-occurrence of the indefinite enumerative **-ndi** with nominal modifiers with the semantic feature of definiteness

The co-occurrence of the indefinite enumerative **-ndi** and the demonstrative is found in contexts that yield a definite inference. Thus, the referent has already been established in the context, and it is identifiable. It is not possible for this co-occurrence combination to appear without such discourse context. In this regard, the enumerative **-ndi** and the demonstrative co-occur together when they modify a head noun that is phonologically empty, i.e. *pro* head. In this co-occurrence, the demonstrative usually occurs before the enumerative **-ndi** which obligatorily retains its Determiner pre-prefix.

- (38) Speaker A: Gipara arabaaze inka yimwe.
 Gipara a - ra - baag - e i - n - ka i-mwe
 PN.Gipara AgrS-PRES-slaughter-PERF Ppfx-9/10-cow 9-one
 ‘Father has slaughtered one cow.’

Speaker B: Kuki arese **izo izindi**?

ku - ki a - rek- e i - zi - o i - zi - ndi
 17LOC-Q.wh why AgrS-leave-PERF DEMrt-10-MEDIAL Ppfx-10-QUANTrt-other
 ‘Why he has left those other ones?’

In the example in (38), the enumerative **-ndi** occurring in the second utterance (Speaker B) modifies a phonologically null lexical head noun, i.e., *pro* head, and it co-occurs with an anaphoric demonstrative which thus denotes an anaphoric reading. Since demonstratives are assumed to encode both a definite and specific reading the DP subject is interpreted as expressing the properties of definiteness and specificity.

6.3.3.3 The co-occurrence of the indefinite enumerative **-ndi** with the modifiers that are inherently neutral regarding (in)definiteness and (non-)specificity

The indefinite enumerative **-ndi** may occur in combination with any of the nominal modifiers that have an inherent neutral meaning regarding (in)definiteness and (non-)specificity. The adjective, the numeral, the possessive, and the clausal relative in this study are assumed to be intrinsically neutral with regard to the semantic features of (in)definiteness and (non-)specificity.

Concerning the syntactic word order, in this co-occurrence combination, the indefinite enumerative **-ndi** usually occurs before the other modifiers. In this regard, the enumerative **-ndi** realizes its obligatory Determiner pre-prefix whereas the other modifiers exhibit the Determiner pre-prefix optionally. Consider the following examples:

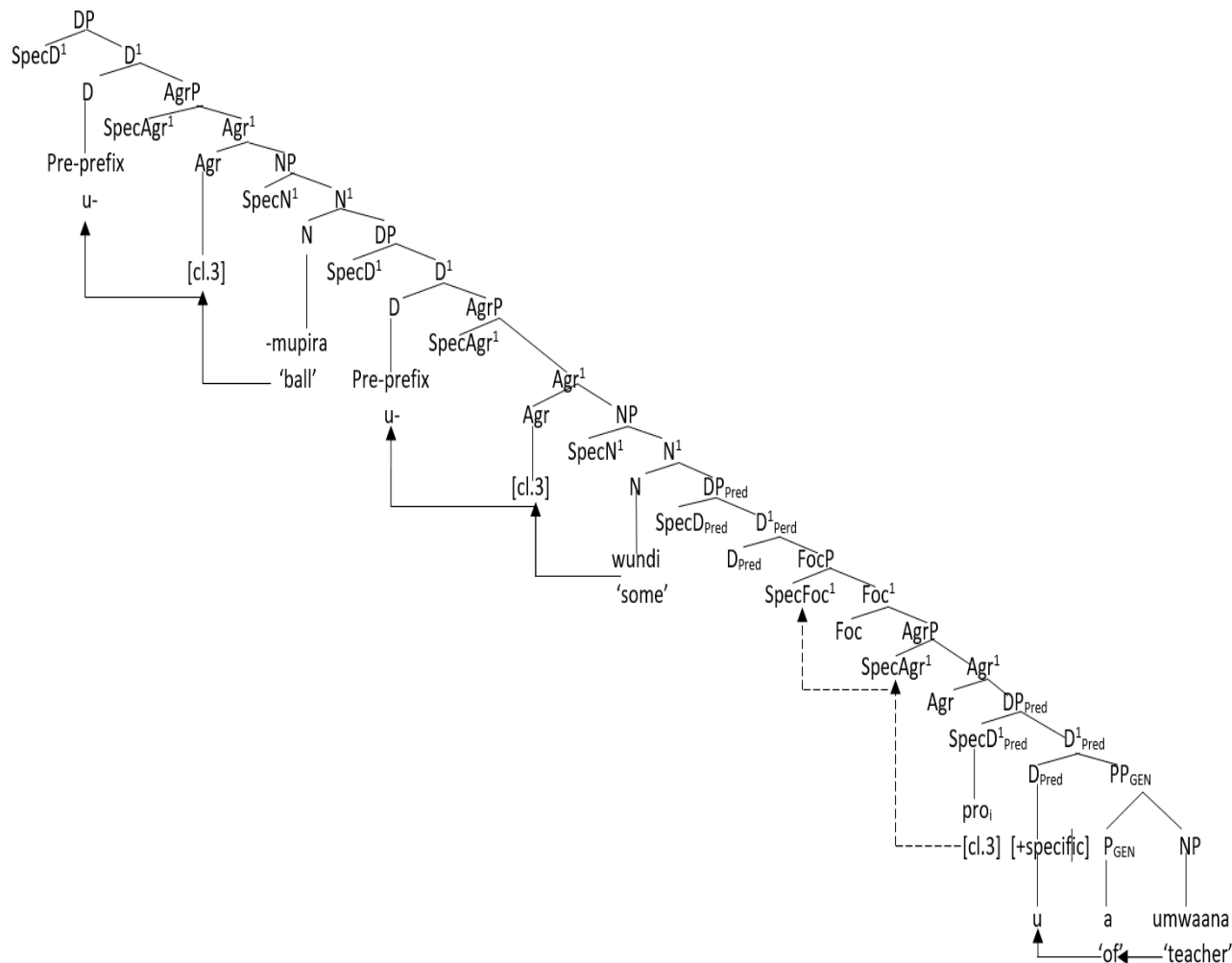
- (39) a. Umuhungu waanje araguze **umupira uwundi (u)munini**.
 u-mu-hungu u - a -nje a - ra - gur - e u-mu-pira
 Ppfx-1-boy 1-GEN-me Ppfx-PRES-buy-PERF Ppfx-3-ball
 u - u-ndi (u)-mu-nini
 Ppfx-3-another (Ppfx)-3-big
 ‘My boy has bought (specifically) the other big ball.’
- b. Umuhungu waanje araguze **umupira uwundi (u)w’umwaana**.
 u-mu-hungu u - a -nje a - ra - gur - e u-mu-pira
 Ppfx-1-boy 1-GEN-me Ppfx-PRES-buy-PERF Ppfx-3-ball
 u - u-ndi (u) - u - a u - mu-aana
 Ppfx-3-QUANTrt-another (Ppfx)-3-GEN Ppfx-1-child
 ‘My boy has bought (specifically) the child’s other ball.’
- c. Umuhungu waanje araguze **umupira uwundi (u)wumwe**.
 u-mu-hungu u - a -nje a - ra - gur - e u-mu-pira
 Ppfx-1-boy 1-GEN-me Ppfx-PRES-buy-PERF Ppfx-3-ball

u - u-ndi (u)- u-mwe
 Ppfx-3-another (Ppfx)-3-one
 ‘My boy has bought (specifically) one ball.’

- d. Umuhungu waanje araguze umupira **uwundi (u)wó ukunda**.
 u-mu-hungu u - a -nje a - ra - gur - e u-mu-pira
 Ppfx-1-boy 1-GEN-me Ppfx-PRES-buy-PERF Ppfx-3-ball
 u - u-ndi (u)-mu-nini
 Ppfx-3-another (Ppfx)-3-big
 ‘My boy has bought (specifically) the other ball which you like.’

A key view in this study is that the adjective (39a), the possessive (39b), the numeral (39c), and the clausal relative (39d) are intrinsically neutral concerning (in)definiteness and (non-specificity) inferences. Therefore, in the absence of the optional Determiner pre-prefix in the inflection of the nominal modifiers with a neutral feature of (in)definiteness and (non-)specificity, the subject DP in (39a-d) illustrating this co-occurrence is interpreted with features of [-definiteness, -specificity]. Given that the Determiner pre-prefix is assumed in this study to be inherently definite end specific, the realization of the optional Determiner pre-prefix in the inflection of nominal modifiers that have a neutral meaning with respect to (in)definiteness and (non-)specificity in (39a-d) illustrate that the particular DPs have readings of definiteness and specificity. Furthermore, the Determiner pre-prefix is related to the information structural notion of contrastive focus which entails that specific referents in (39a-d) are contrasted with other alternative referents. These alternative referents are implicitly known by interlocutors in the context of (38a-d). Similarly, to other contexts where the Determiner pre-prefix occurs with nominal modifiers with a neutral feature of (in)definiteness and (non-)specificity, the appearance of the Determiner pre-prefix on the inflection of the adjective, the possessive, the numeral, and the clausal relative in (39a-d) is structurally represented as a Determiner predicate introducing a DP Predication structure. For instance, the interpretative features of the DP constituent in sentence (39b) above can be represented as follows:

- (40) The Phrase Structure of the DP object [umupira uwundi uw’umwaana] in igiHa sentence:
 Umuhungu waanje araguze **umupira uwundi (u)w’umwaana**.
 ‘My boy has bought (specifically) the child’s ball.’



6.3.4 The enumerative nyene

6.3.4.1 The meaning and morpho-syntactic structure

The enumerative **nyene** has the meaning of the English ‘alone, only, by oneself, no one else’. It is formed by the first and second personal pronoun stems, singular or plural which is prefixed to the enumerative stem **nyene**, as illustrated in table 23:

Table 23: Morphological structure of the enumerative nyene with first and second persons

Person	Pronoun	Structure	Example	Gloss
1SG	je	je-nyene	jenyene	‘I alone, only me, by myself’
1PL	twe	twe-nyene	twenyene	‘we alone, only us, by ourselves’
2SG	we	we-nyene	wenyene	‘you alone, only you, by yourself’
2PL	mwe	mwe-nyene	mwenyene	‘you alone, only you, by yourselves’

For the various noun classes person singular and plural, the enumerative modifier **nyene** is formed by an agreement prefix corresponding to the noun class prefix to the lexical head noun, and the stem, to which I refer as an emphatic pronoun **-eene** to express the meaning of the English words ‘itself, oneself, herself, himself, or themselves. Table 24 illustrates these forms:

Table 24: Morphological structure of the enumerative nyene with different noun classes

Noun class	Structure	Example	Gloss
1 -mu-	u-eene-nyéne	weenenyene	‘he, she alone; only him, her; by himself, herself’
2 -ba-	ba-een-nyéne	beenenyene	‘they alone, only them, by themselves’
3 -mu-	u-eene-nyéne	weenenyene	‘it alone, only it, by itself’
4 -mi-	i-eene-nyéne	yeenenyene	‘they alone, only them, by themselves’
5 -ri-/-Ø-	ri-eene-nyéne	dyeenenyéne	‘it alone, only it, by itself’
6 -ma-	i-eene-nyéne	yeenenyéne	‘they alone, only them, by themselves’
7 -ki-	ki-eene-nyéne	cheenenyene	‘it alone, only it, by itself’
8 -bi-	bi-eene-nyéne	vyeenenyene	‘they alone, only them, by themselves’
9 -N-	i-eene-nyéne	yeenenyene	‘it alone, only it, by itself’
10 -N-	zi-eene-nyéne	zeenenyene	‘they alone, only them, by themselves’
11 -ru-	ru-eene-nyéne	gweenenyene	‘it alone, only it, by itself’
12 -ka-	ka-eene-nyéne	keenenyene	‘it alone, only it, by itself’
13 -tu-	tu-eene-nyéne	tweenenyene	‘they alone, only them, by themselves’
14 -bu-	bu-eene-nyéne	bweenenyene	‘it alone, only it, by itself’
15 -ku-	ku-eene-nyéne	kweenenyene	‘it alone, only it, by itself’
16 -ha-	ha-eene-nyéne	heenenyene	‘that (situation) alone, only that place’
17 -ku-	ku-eene-nyéne	kweenenyene	‘that manner alone; only that place’
18 -mu-			
23 i-			

Since the locative classes, 18 and 23 have no enumerative, the enumerative for the noun class 16 **heenenyene** ‘only that place’ can extend its use to modify nominals in the locative classes 17 and 23.

Syntactically, the enumerative **nyene** usually occurs in the adjacent position after the lexical head noun it modifies. The enumerative **nyene** cannot appear in the pre-nominal position. The enumerative **-nyene** can, however, in rare cases occur without a lexical head noun, i.e. a *pro* head, and without any other modifiers, particularly when used in responding to a question. The enumerative **nyene** takes an obligatory Determiner pre-prefix when it appears with a *pro* head. It can similarly occur as a question to denote doubt, dissatisfaction, or surprise, as illustrated in the following examples, the response from Speaker B in (41b).

- (41) a. **Umwaana weenenyene** arabonye ukweezi.
u-mu-aana u-eene-nyene a - ra - bon - e u - ku-eezi

Ppfx-1-child 1-EMPH-alone AgrS-PRES-see-PERF Ppfx-15-moon
 ‘The child alone has seen the moon.’

- b. Speaker A: Bichuro hayagura ibirumpu n’biki?
 Bichuro ha - ya - gur-a i - bi-rumpu na i -bi - ki
 Pn.Brochure PROG-AgrS-buy-FV Ppfx-8-potatoe ASS Ppfx-8-Q.what
 ‘Bichuro is buying potatoes and what else?’

Speaker B: **Ivyeenenyene**.
 bi-eene-nyene
 8-EMPH-alone
 ‘themselves?’ [with emphasis]

The enumerative **-nyene** is semantically definite in terms of the notion of identifiability. According to Lyons’s (1999) identifiability notion, a referent is definite if the hearer can identify it in the context of the conversation (although he/she does not necessarily need to be familiar with it/him/her). The enumerative **-nyene** is used in the discourse context where the hearer can identify the referent being referred to by the speaker. In example (41a), the speaker assumes that the hearer knows the entity being talked about. Regarding the feature of specificity, the emphatic pronoun **-eene** encodes a reading of emphasis on the referent, which is associated with a reading of specificity.

For the context where the enumerative **-eene** occurs with a *pro* head in (41b), the referent has an anaphoric reading and the obligatory occurrence of the Determiner pre-prefix encodes contrastiveness. For instance, Speaker B is implicitly aware that there are other alternative entities that Bichuro could buy apart from potatoes. Thus, in the utterance of Speaker B, the Determiner pre-prefix occurs to denote that Bichuro bought specifically potatoes alone and no other things.

6.3.4.2 The co-occurrence of the enumerative -nyene and nominal modifiers with the semantic feature of definiteness

Concerning the nominal modifiers that have the feature of definiteness, the occurrence of the enumerative **nyene** is incompatible with the demonstrative and the anaphoric determiners **-aa**, **-áá-ndi**, and **nya-** in one DP nominal domain, as illustrated by the ungrammatical and unacceptable example in (42a). However, as (42b) exemplifies, it is possible for the demonstrative to appear in the subject position and the enumerative **nyene** in a post-verbal

position, thus yielding the reading that the action denoted by the verb has happened by it/him/her/themselves, having the reference of the subject DP.

- (42) a. *Igitebe **iki cheenenyene** kiravunise.
 i - ki-tabo i - ki - Ø ki-eene-nyene ki - ra - vunik-e
 Ppfx-7-book Ppfx-7-PROX 7-EMPH-nyene AgrS-PRES-break-PERF
 ‘*This chair itself has broken.’
- b. Umugutu **uwu waameze weenenyene**.
 u - mu-gutu u - u - Ø u - aa - mer - e u-eene-nyene
 Ppfx-3-forest DEMrt-3-PROX AgrS-PASS-germinate-PERF 3-EMPH-self
 This forest germinated itself.’

6.3.4.3 The co-occurrence of the enumerative -nyene and a nominal modifier with a neutral semantic feature of (in)definiteness

The enumerative **-nyene** can co-occur together in one DP nominal domain with other nominal modifiers that are inherently neutral concerning the feature of (in)definiteness. In this combination, the nominal modifier with a neutral feature follows **nyene**. In this regard, the modifier that having a neutral meaning with respect to (in)definiteness and (no-)specificity exhibit an optional Determiner pre-prefix for expressing specificity. The examples in (43a-d) illustrate the combination of the enumerative **-nyene** and the adjective, the possessive, the numeral, and the clausal relative, respectively.

- (43) a. **Umupira weenenyene, (u)wunini** wuramenese.
 u - mu-pira u-eene-nyene (u) - u-nini u - ra - menek-e
 Ppfx-3-ball 3-EMPH-self (Ppfx)-3-big AgrS-PRES-bust-PERF
 Lit: The big ball itself has burst.
 ‘The big ball has burst itself.’
- b. **Ugutwi kweenenyene, (u)kw’anje** kuragwara.
 u - ku-twi ku-eene-nyene (u) - ku - a -nje ku - ra - gwar-a
 Ppfx-15-ear 15-EMPH-self (Ppfx)-15-GEN-me AgrS-PRES-pain-FV
 Lit: (Specifically) my ear itself pains.
 ‘(Specifically) my ear pains itself.’
- c. **Inzu yeenenyene, (i)yimwe** yirahongorose.
 i - n - zu i-eene-nyene (i) - i-mwe i - ra - hongorok-e
 Ppfx-9/10-house 9-EMPH-self (Ppfx)-9-one AgrS-PRES-break-PERF
 Lit: (Specifically) the one house itself broken.
 ‘(Specifically) the one house was broken by itself.’

d. **Urutoke gweenenyene, (u)gwo waavunye ruraikiza**

u - ru-toke ru-eene-nyene (u) -ru- o u-aa-vun -e ru - ra - ikiz-a
 Ppfx-11-finger 11-EMPH-alone (Ppfx)-11-REL 3-PAST-break-PERF AgrS-PRES-heal-FV
 ‘(Specifically) the finger which you broke heals itself.’

I posit that the occurrence of the optional Determiner pre-prefix in the inflection of the nominal modifiers with a neutral feature of (in)definiteness manifests features of specificity and contrastive focus. Therefore, the occurrence of the Determiner pre-prefix in the inflection of the adjective, the possessive, the numeral, and the clausal relative in (43a-d), respectively encodes the reading that the DP is interpreted as having the semantic feature of specificity and the information structural feature of contrastive focus. For instance, the Determiner pre-prefix in the inflection of the adjective in (43a) encodes the reading to the hearer to point out one specific big ball from other (implicitly known) alternative balls in the discourse context of the conversation. The occurrence of the Determiner pre-prefix in the morphology of the genitive in (43b), the numeral in (43c), and the clausal relative in (43d) yields the reading to the hearer of drawing his/her attention to one specific referent that contrasts with other implicit alternatives in the discourse context. In addition, the occurrence of the compulsory prosodic pause before nominal modifiers with a neutral feature of (in)definiteness denotes focus.

6.3.5 The similative enumerative **nka-**

6.3.5.1 Meaning and morpho-syntactic structure

Another enumerative is the similative **nka-**. It can be translated in English as ‘similar/like’. Enumeratives can be formed from the similative stem **nka-** and personal pronoun stems. The similative **nka-** is not compatible with the noun classes (see Table 25 below).

Table 25: The morphological structure of the similative enumerative **nka-**

Person	Pronoun	Structure	Example	Gloss
1SG	je	nka-je	nkaje	‘like me’
1PL	twe	nka-twe	nkatwe	‘like us’
2SG	we	nka-we	nkawe	‘like you’
2PL	mwe	nka-mwe	nkamwe	‘like you’

Syntactically, the similative enumerative **nka-** usually follows the head noun it modifies. The enumerative **nka-** cannot occur in the pre-nominal position, as illustrated by the ungrammatical and unacceptable example in (44b) below:

- (44) a. **Ikimari nkaje** ntikimenya ugusoma.
 i - ki-mari nka-we nti - ki - meny-a ku -som - a
 Ppfx-7-stupid like-me NEG-AgrS-know-FV INF-read-FV
 ‘A/the stupid like me does not know to read.’
- b. ***Nkawe ikimari** ntikimenya gusoma.
 nka-je i - ki-mari nti - ki - meny-a ku -som-a
 like-me Ppfx-7-stupid NEG-AgrS-know-FV INF-read-FV
 ***Lit:** Like you a/the stupid does not know to read.’

In addition, the similative enumerative **nka-** occurs as a predicate complement while the head noun being modified occupies the subject position. The following example illustrates this property:

- (45) Kwizera ni **nkaje**.
 Kwizera ni nka-je
 Pn.Kwizera COP like-me
 ‘Kwizera is like me.’

The similative enumerative **nka-** can further occur without an overt lexical head noun in the context where the speaker has a particular referent in the mind. However, in this regard, the similative enumerative **nka-** does not exhibit the Determiner pre-prefix, as demonstrated in the ungrammatical and unacceptable example in (46b) below:

- (46) Speaker A: Uwu umwaana asa nkande?
 U - u - Ø u-mu-aana a - s - a nka-nde
 DEMrt-1-PROX Ppfx-1-child AgrS-look-FV like-Q.who
 ‘What does this child look like?’
- a. Speaker B: **Nkaje**
nka-je
 like-me
 ‘like me’
- b. Speaker B: ***Ankajen**

Regarding its semantic features, the enumerative **nka-** is inherently definite and specific. Entities that are modified by the similative enumerative **nka-** are definite in terms of the identifiability notion proposed by Lyons (1999). In addition, the referent is specific if the speaker is aware of the particular referent he is referring to. Consider the following example:

- (47) Umwaana nkawe ntaakina na'bavyeyi.
 u - mu-aana nka-we ntaa -kin-a na a - ba-vyeEyi
 Ppfx-1-child like-you NEG-kin-FV ASS Ppfx-2- parent
 'The child like you does not play with parents.'

In the example in (47) above, the similative enumerative **nka-** refers to the noun **umwaana** 'child' who is the hearer of that utterance. In this regard, the hearer can identify the referent (himself/herself), in terms of the identifiability factor. Similarly, the speaker is talking about the child s/he knows in the context of the utterance in (47), hence a specific reading is realized.

6.3.5.2 The co-occurrence of the similative enumerative **nka-** and other nominal modifiers with a feature of definiteness

The similative enumerative **nka-** is disallowed with nominal modifiers that have a semantic feature of definiteness, such as the demonstrative, and the anaphoric determiners **-áá**, **-áá-ndi**, and **nya-** in the same nominal domain, as exemplified by unacceptable examples in (48a-b):

- (48) a. ***Umubobwa uwu nkawe** ntaagomba guchwekera.
 u-mu-kobwa u - u - Ø nka-we ntaa-gomb-a ku-chweker-a
 Ppfx-1-girl DEMrt-1-PROX like-you NEG-want-FV INF-roam-FV
 'This girl like you does not want to roam'
- b. ***Waa mukubwa nkawe** ntagomba guchwekera.
 u-aa u-mu-kobwa nka-we ntaa-gomb-a ku-chweker-a
 1-DET Ppfx-1-girl like-you NEG-want-FV INF-roam-FV
 'This girl like you does not like to roam.'

Although the examples in (48a-b) are grammatical, they are not acceptable. The co-occurrence of the similative enumerative **nka-** and the demonstrative in (48a) and the anaphoric determiner **-aa** in (48b) yields an unacceptable meaning for the sentence. This combination, however, may be possible where the similative enumerative **nka-** occurs in a copular predicative structure, as illustrated in the following example (49):

- (49) Umuhungu **wuno** ari **nkawe**.
 u-mu-hungu Ø - u - no a - ri nka-we
 Ppfx-1-boy DEMrt-1-MEDIAL AgrS-be similar-you
 'This boy is similar to you.'

As the example in (49) demonstrates, the similative enumerative **nka-** occurs in a copular predicative construction, with the demonstrative in the subject position, hence two different

nominal domains. The next subsection examines the co-occurrence of the similative enumerative **nka-** with other nominal modifiers that are inherently neutral regarding the feature of (in)definiteness.

6.3.5.3 The co-occurrence of the similative enumerative **nka-** and other nominal modifiers with a neutral feature of (in)definiteness

Like other enumerative modifiers, the similative enumerative **nka-** can co-occur other with nominal modifiers that have a neutral feature regarding (in)definiteness, such as the adjective, the numeral, and the clausal relative. Unlike other enumerative modifiers, the similative enumerative **nka-** cannot co-occur with the possessive in the same DP nominal domain. This combination usually occurs in the post-nominal position. In this regard, the similative enumerative **nka-** preferably occurs after either of the nominal modifiers in the subject. The following constructions where the similative enumerative **nka-** occurs with the clausal relative (50a) and the adjective in (50b) are examples, while (50c) illustrates the unacceptable co-occurrence of the enumerative **nka-** and the possessive:

- (50) a. **Umwishwa (u)wó ukunda nkaje** araremba.
 u - mu - ishwa (u) - u - ó u - kund - a nka - je a - ra - remb - a a - ba - vyeyi
 Ppfx-1-cousin (Ppfx)-1-REL 2SG-love-FV like-me AgrS-PRES-obey-FV Ppfx-2-parent
 ‘The cousin (specifically) who you love like me obeys parents.’
- b. **Abantu (a)banini nkamwe** barakina iragibi neza.
 a - ba - ntu (a) - ba - nini nka - mwe ba - ra - kin - a neza i - Ø - ragibi.
 Ppfx-2-person (Ppfx)-2-fat like-you AgrS-PRES-play-FV well Ppfx-5-rugby
 ‘(Specifically) the big people like you play rugby well.’
- c. ***Umugore (u)waawe nkawe** aramenya gusoma.
 u - mu - gore (u) - u - a - we nka - we a - ra - meny - a ku - som - a
 Ppfx-1-wife (Ppfx)-3-GEN-you like-you AgrS-PRES-know-FV INF-read-FV
 ‘*His wife like you knows to read.’

The example in (50c) looks grammatical, but it has an unacceptable meaning. The reason is that both the possessive and the enumerative **nka-** contain morphemes with the meaning of ‘ownership’. Therefore, for these two nominal modifiers to co-occur one must occur in the predicatee consider the following example.

- (51) Umugore **(u)waawe** aramenya gusoma **nkawe**.
 u - mu - gore (u) - u - a - we nka - we a - ra - meny - a ku - som - a

Ppfx-1-wife (Ppfx)-3-GEN-you like-you AgrS-PRES-know-FV INF-read-FV
 ‘*His wife like you knows to read.’

I view the similative enumerative **nka-** to be inherently definite and specific. Thus, the DP containing it co-occurring with the nominal modifiers having a neutral semantic feature regarding (in)definiteness has both definite and specific interpretations. The occurrence of the Determiner pre-prefix in the inflection morphology of the nominal modifiers with a neutral feature of (in)definiteness in (50a-c) encodes additional emphasis and specificity that intersects with the information structural property of contrastive focus. Thus, the utterance of the speaker of the sentence with the DP exhibiting the Determiner pre-prefix, for instance, in (50a) serves as an indicator to the hearer to point out the specific cousin whom the hearer and the speaker like from among other implicitly known alternative cousins available in the discourse context (see the discussion on contrastive focus and implicit alternatives by Repp 2016).

6.4 The interrogative

Regarding their syntactic position, Rugemalira (2007) maintains that interrogative modifiers in Bantu languages generally occur after all other nominal modifiers in a DP because they denote an enquiry about the description of the nominal. This subsection examines the morpho-syntax of four interrogative modifiers in igiHa, namely, **-he**, **-nte**, **-nde**, and **-ki**, and its associated discourse-pragmatic interpretations. Each of these has its own idiosyncratic morpho-syntactic and discourse-semantic properties, but they all occur are syntactically in a post-nominal position.

6.4.1 The interrogative stem **-ndé**

6.4.1.1 Meaning and morpho-syntactic structure

The interrogative modifier **-nde** denotes humans. Thus, it has a semantic feature that restricts its use only to entities that have the feature [+human]. It is translated into the English ‘who or whose’. The lexical head noun modified by the interrogative **-nde** denotes the inherent semantic features of indefiniteness and non-specificity. The interrogative **-nde** is formed by an agreement prefix corresponding to the noun class prefix of the lexical head noun it modifies prefixed to **-nde**. When denoting nouns in class 1/2, the interrogative **-nde** is preceded by the copular **ni-** to express the meaning of ‘who’ (52a-b).

(52) a. Aba ni **bandé**?

a - ba - Ø ni ba-ndé
 DET-2-PROX Cop Agr-Q.who
 ‘Who are these?’

- b. Uwu mugabo **nindé**?
 u - u - Ø mu-gabo ní - ndé
 DET-1-PROX 1 - man Cop-Q.who
 ‘Who is that man?’

The interrogative modifier **-nde** can be prefixed with the agreement prefix corresponding to the noun class prefix of the modified lexical noun which is followed by the genitive **-a** to form an interrogative modifier, with the meaning of “whose” as exemplified below:

- (53) a. Iki gitabo ní **chandé**?
 i - ki - Ø ki-tabo ní ki- a i - u - a - ndé
 DET-7-PROX 7-book COP 7-GEN 23LOC-1-GEN-Q.who
 ‘Whose book is this.’

- b. **Umukobwa wande** ashinze umudari?
 U - mu-kobwa u - a - nde a -shind-e u -mu-dari
 Ppfx-1-daughter 1-GEN-Q.whose AgrS-win-PERF Ppfx-3-medal
 ‘Whose daughter has won the/a medal?’

The interrogative **-nde** cannot realize the Determiner pre-prefix. The lexical head noun obligatorily occurs with its Determiner prefix even in the context where the interrogative **-nde** precedes it.

Syntactically, the interrogative **-nde** usually occurs after the lexical head noun (54a). However, although relatively uncommon, the interrogative **-nde** can occur before the lexical head noun (54b), particularly when the speaker wants to express surprise or uncertainty regarding the proclamation made previously in the discourse.

- (54) a. Subira hayamesa **imyeenda yande**?
 Subira ha - ya - mes- a i -mi-eenda i - a - nde
 Pn.Subira AgrS-PROG-wash-FV Ppfx-4-cloth 4-GEN-Q.whose
 ‘Whose clothes is Subira washing?’

- b. **Bande, abaana** bakunguse?
 ba-nde a-ba-aana ba - kunguk-e
 2-Q.who Ppfx-2-child AgrS-injure-PERF
 ‘Who are the injured children?’

In example (54) where the interrogative uncanonically occupies the pre-nominal position, the lexical head noun obligatorily exhibits its Determiner pre-prefix. In addition, the interrogative **-ndé** can for the purpose of denoting certain pragmatic meanings, occur with a *pro* head when the referent has already been mentioned in the previous discourse. In this occurrence, the interrogative **-nde** occurs without the lexical head. Consider the following examples:

- (55) Speaker A: Uraboonye umupira wirabura mukibanza?
 u- ra- bóón- e u-mu-pira u-irabura mu- ki-banza
 2SG-PRES-see-PERF Ppfx-3-ball 3-black 18LOC-7-field
 ‘Have you seen a black ball in the field?’

Speaker B: Ndawubóónye! Ni **wandé**?
 n- ra- u- bóón-e! ni u - wa - ndé?
 1SG-PRES-OBJ-see-PERF Cop 3-GEN-Q.who
 ‘I have seen it. It is whose (ball)?’

In this context the utterance **ni wande** ‘whose is’ contains the interrogative **-nde** that occurs without a lexical head noun. However, it exhibits the agreement prefix of the phonologically empty head *pro*.

Regarding the discourse-pragmatic features of (in)definiteness and (non-)specificity, the modifiers occurring with the post-nominal interrogative **-nde** can be indefinite, but they can be specific or non-specific, depending on the discourse context. The question denoted by the interrogative **-nde** entails that the speaker intends to uniquely identify the referent. Consider the following example:

- (56) **Bande** bamukubise Kwizera?
 ba-nde ba - mu-kubit-e Kwizera
 2-Q.who AgrS-OM-beat-PERF PN.Kwizera
 ‘Who have beaten Kwizera?’

In the discourse context of the utterance in (56) above the speaker is aware that some people have beaten Kwizera but the speaker does not know them. Thus, s/he employs the interrogative **-nde** in his/her question so that the hearer can specify them. In this regard, the referents are unfamiliar and the speaker enquires the hearer to identify the particular exact group of people who have beaten Kwizera. However, the DP can be interpreted with a feature of definiteness in a context where the interrogative **-nde** occurs pre-nominally. In this context, the speaker is familiar with the referent, hence it is uttered as an afterthought that follows a prosodic pause. The

example in (54b) indicates that the speaker knows that there are children who are injured and s/he is enquiring the hearer to identify the particular ones. Hence, the DP in (54b) is definite but non-specific. A similar semantic interpretation is attested in the context where the interrogative – **nde** occurs with a *pro* head. Considering the example in (55), where Speaker B is aware of the referent **umupira** ‘ball’ which is introduced in the discourse context by speaker A in the preceding utterance. Speaker A is enquiring if Speaker B has seen the black ball in the field. Speaker B responds by stating that she saw it and further asks who the ball belongs to. When asking, speaker B employs the interrogative **-nde** without the lexical noun because the latter is familiar in the discourse context. In this regard, the DP containing the interrogative **-nde** which modifies an implicit lexical head noun, the *pro* head, is interpreted with the semantic feature of definiteness through the notion of familiarity. Since Speaker B in this utterance is enquiring the speaker A to specify the owner of the ball, the semantic features encoded in this DP is [+definiteness, -specificity]. Furthermore, the absence of the Determiner pre-prefix in the inflection of the interrogative **-nde** disallows the DP from realizing the feature of contrastive focus.

6.4.1.2 The co-occurrence of the interrogative **-nde** and nominal modifiers with the semantic feature of definiteness

In igiHa, the interrogative **-nde** cannot co-occur with modifiers that are intrinsically definite such as the demonstrative. The example in (57a) illustrates the ungrammaticality and unacceptability of the co-occurrence of the indefinite interrogative **-nde** and a definite modifier, i.e., the demonstrative. However, the utterance may be acceptable when either the demonstrative or the interrogative **-nde** occurs in a different DP, as in (57b-c). Hence, the indefinite interrogative **-nde** cannot co-occur with the definite modifier in the same nominal domain.

- (57) a. *Abaana **aba bande** habarima umurima?
 a - ba-aana a - ba - Ø ba-nde ha - ba - rim-a u-mu-rima
 Ppfx-2-child DEMrt-2-PROX 2 -Q.who PROG-AgrS-dig-FV Ppfx-3-farm
 ‘*Who these children are digging a/the farm.’
- b. Abaana **bande** habarima **uwu** murima?
 a - ba-aana a - ba - Ø ba-nde ha - ba - rim-a u-mu-rima
 Ppfx-2-child DEMrt-2-PROX 2 - Q.who PROG-AgrS-dig-FV Ppfx-3-farm
 ‘Who these children are digging a/the farm.’

c. Umurima **uwu** hawurimwa **nande**?

u - mu-rima u - u - Ø ha - u - rim - w - a na - nde
 Ppfx-3-farm DEMrt-3-PROX PROG-AgrS-dig-PASS-FV PREP-Q.who
 ‘This farm is dug by whom?’

Since the demonstrative which is inherently definite and specific cannot co-occur with the interrogative **-nde** in the same DP, the DP containing the interrogative **-nde** still lacks the feature of specificity in this context.

6.4.1.3 The co-occurrence of the interrogative **-nde** and nominal modifiers with a neutral semantic feature of (in)definiteness

The interrogative **-nde** is compatible with other nominal modifiers that possess an inherent neutral feature concerning (in)definiteness. These include the adjective, the possessive, the numeral, and the clausal relative. This co-occurrence combination usually occurs in the post-nominal position, where the interrogative **-nde** may appear before other nominal modifiers.

(58) a. **Umwana wande (u)munini** hayagenda kwishuri?

u - mu-aana u - a -nde (u) -mu-nini ha - ya-gend-a ku - i-shuri
 Ppfx-1-child 1-GEN-Q.whose (Ppfx)-1-fat PROG-AgrS-god-FV 17LOC-5-school
 ‘Whose (specifically) fat child is going to school?’

b. **Umwana wande (u)wó nkunda** hayagenda kwishuri?

u - mu-aana u - a -nde (u) - u-ó n - kund-a ha - ya-gend-a ku - i-shuri
 Ppfx-1-child 1-GEN-Q.whose (Ppfx)-1-REL 1SG-love-FV PROG-AgS-god-FV 17LOC-5-school
 ‘Whose child (specifically) whom I love is going to school?’

c. **Abaana bände (a)babiri** habagenda kwishuri?

a - ba-aana ba - a -nde (a) -ba-biri ha - ya-gend-a ku - i-shuri
 Ppfx-2-child 2-GEN-Q.whose (Ppfx)-2-two PROG-AgS-god-FV 17LOC-5-school
 ‘Whose (specifically) two children are going to school?’

d. ***Umwana wande (u)waanje** hayagenda kwishuri?

ni - nde u - mu-aana (u) - u - a -nje ha - ya - gend-a ku - i-shuri
 Cop-Q.who Ppfx-1-child (Ppfx)-1-GEN-me PROG-AgrS-god-FV 17LOC-5-school
 ‘Whose (specifically) my child is going to school?’

The examples in (58a-c) illustrate that the nominal modifier with interrogative **-nde** as possessor complement of the genitive **a-** can co-occur with nominal modifiers that are inherently neutral concerning the semantic feature of definiteness in the same DP. In this co-occurrence combination, the nominal modifier that occurs after the interrogative **-nde** can take an optional Determiner pre-prefix. However, the possessive modifier cannot occur in the same DP with the

interrogative **-nde** because both contain the genitive-like element that denotes the meaning of ownership encoded by the genitive **-a**. Therefore, the example in (58d) is unacceptable in igiHa.

Regarding the semantic features of (in)definiteness and (non)specificity, the DP containing the interrogative **-nde**, and either the adjective (58a), the possessive (58b), the clausal relative (58c), or the numeral (58d), is indefinite and non-specific. However, the occurrence of the optional Determiner pre-prefix in the inflectional morphology of those nominal modifiers in (58a-c), is associated with the discourse-pragmatic features of specificity and contrastive focus. Thus, the occurrence of the Determiner pre-prefix denotes a reading indicating to the hearer to point out one specific child from other possible children in the discourse context. As has been argued previously in this study, the Determiner pre-prefix that appears on the inflection of the nominal modifier is posited as functional category Determiner predicate (D_{Pred}) that heads the DP predication construction (see Panagiotidis and Marinis, 2011).

6.4.2 The interrogative **-he**

6.4.2.1 The meaning and morpho-syntactic structure

The interrogative **-he** has a meaning in English of ‘which (one)’. The interrogative **-he** is formed with an optional Determiner pre-prefix, an agreement prefix corresponding to the lexical or phonologically empty (*pro*) head noun it modifies, and the genitive **-a**. The genitive vowel is phonologically lengthened. Consider the following examples:

- (59) a. Ugomba ibitabo (**i**)**vyaa**hé muri ibi?
 u- gomb-a i- bi-tabo i- bi- a- hé mu- ri i - bi
 2SG-want-FV Ppfx-8-book Ppfx-8-GEN-Q.which Loc18-Cop Ppfx-DEM1
 ‘Which [specific] books do you want among these?’

Syntactically, the interrogative **-he** usually occurs after the lexical head noun, both in the subject and the object syntactic positions. It realizes an optional Determiner pre-prefix in its inflection morphology. It realizes a compulsory Determiner pre-prefix when it occurs uncanonically in the pre-nominal position. In addition, the interrogative **-he** can appear without an overt lexical head noun, i.e. a *pro* head, in which case it exhibits a compulsory Determiner pre-prefix. Consider the following examples:

- (60) a. **Urutoke (u)gwaahé** ruvunise muri izo ntoke zitanu?
 u - ru-toke u - ru- a - he ru-vinik - e mu - ri
 Ppfx-11-finger Ppfx-11-GEN-Q.which AgrS-break-PERF 18LOC-Cop
 i - zi - o n-toke zi-tanu
 DEMrt-10-MEDIAL 10-finger 10- five
 ‘Which specific finger has broken from those five fingers?’
- b. Udandaje **imbwa (i)yaahé**?
 u - dandaz-e i - n - bwa i - i - a - he
 Ppfx-sell-PERF Ppfx-9/10-dog Ppfx-9-GEN-Q.which
 ‘Which specific dog have you sold?’
- c. Speaker A: Umwigisha araguze ibitabo.
 u - mu-igisha a - ra -gur -e i - bi-tabo
 Ppfx-3-teacher 3SG-PRES-buy-PERF Ppfx-8-book
 ‘he bought a book.’

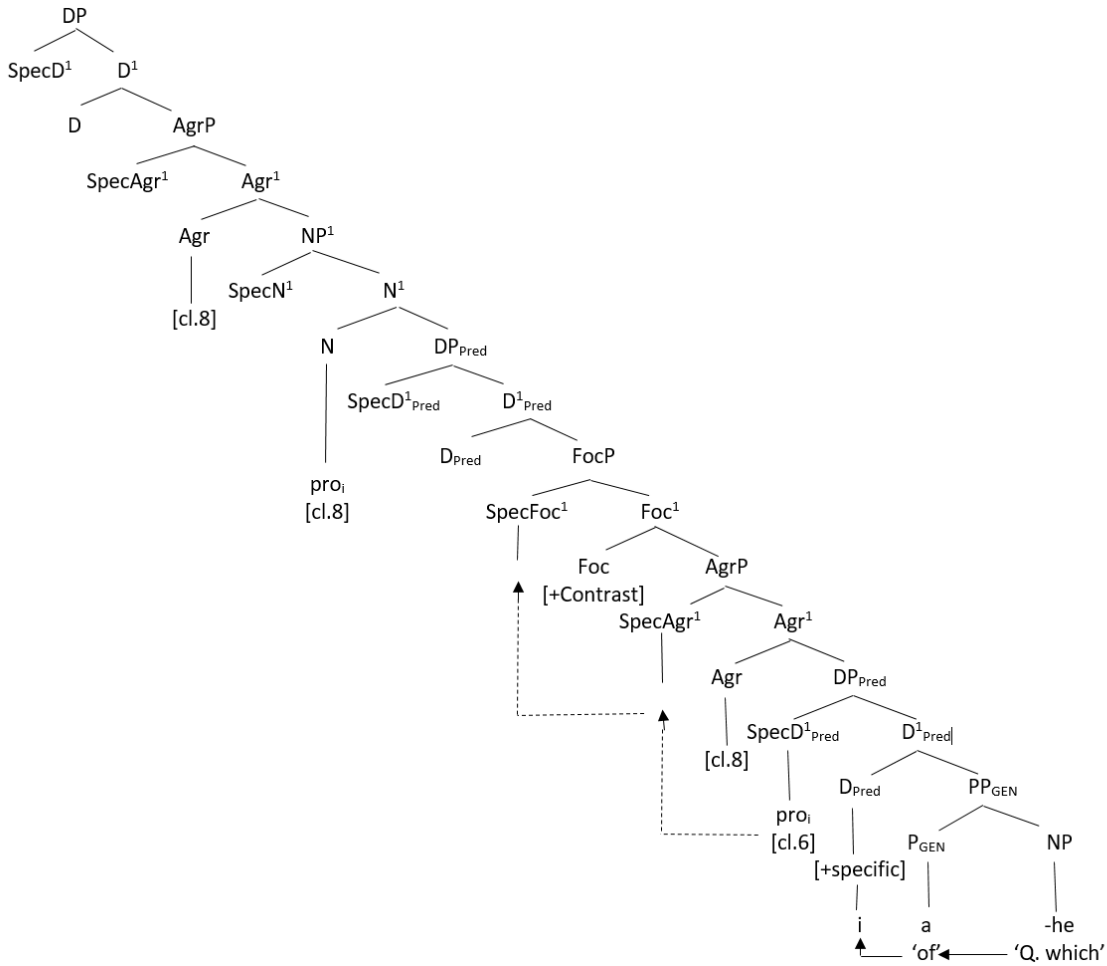
Speaker B: **ivyaaahé** muri ibi vyirabura?

i- bi- a- hé mu- ri i - bi - Ø bi-irabura
 Ppfx-8-GEN-which Loc18-Cop DEMrt-8-PROX 8-black
 ‘Specifically which among these black ones?’

As pointed out previously, I consider the occurrence of the Determiner pre-prefix to be associated with the interpretive features of specificity and contrastive focus. In the examples in (60a-c) above, the interrogative **-he** appears with a Determiner pre-prefix which encodes the interpretation that the speaker has specific referent(s) in mind that s/he wants the hearer to identify. For instance, in (60a) the speaker’s utterance has the determiner pre-prefix in the inflection of the interrogative **-he** which indicates that the speaker wants to know the specific finger which is broken. In addition, the Determiner pre-prefix in (60a) is associated with the information structural feature of contrastive focus in the sense that the speaker wants the hearer to identify one specific finger among the five fingers explicitly mentioned in the utterance. This view relates to Repp’s (2016) proposals of explicit alternatives in identifying contrastive focus. The other fingers constitute an explicit alternative set because they are overtly mentioned in the utterance. In the case of (60b) the Determiner pre-prefix is associated with identifying the specific dog which is sold among other covert dogs, hence dogs as implicit alternatives. As far as (60c) is concerned, the contrastive focus reading is linked with explicit alternatives because the alternatives are overtly mentioned in the utterance. The speaker intends the hearer to identify a set of specific books among the black books which are physically available in the discourse

context. The occurrence of the proximal demonstrative **ibi** ‘this’ in the predicative position denotes that the alternative books are available in the discourse context (see discussion on contrastive focus and alternatives by Repp 2016). Similar to other nominal modifiers, the Determiner pre-prefix that occurs in the inflection of the interrogative **-he** like in (60a-c), is posited as a functional category, Determiner predicate, D_{Pred} , heading a DP predication structure. Given the above interpretive properties, the structural representation of the DP constituent in (60c) above is as follows:

- (61) The Phrase structure of the *pro* head DP [ivyaha] in igiHa sentence:
Ivyahé muri ibi vyirabura?
 ‘Specifically which books he among these black ones?’



6.4.2.2 The co-occurrence of the interrogative **-he** and nominal modifiers with the semantic feature of definiteness

The occurrence of the interrogative **-he** is not compatible with other nominal modifiers with the semantic feature of definiteness. In this regard, the interrogative **-he** cannot co-occur with the demonstrative in one DP domain, as exemplified by the ungrammatical and unacceptable construction in (62a). Similar to other interrogatives such as **-nde**, the interrogative **-he** can occur with a demonstrative when one of them occurs in a different DP in the clause position, as the sentence in (62b) exemplifies:

- (62) a. *iki (i)chaahe hakidandazwa?
 i - ki - Ø (a) - ki - a - he ha - ki-dandaz - w - a
 Ppfx-7-PRPX (Ppfx)-8-GEN-Q.which PROG-7 - sell- PASS-FV
 ‘Which is this being sold?’
- b. Iki ni (i)chaahe chó ugomba?
 i - ki-Ø ni (i) -ki - a - he ki-ó u-gomb-a
 DEMrt-7-PROX Cop (Ppfx)-7-GEN-Q.which 7-REL 2SG-want-FV
 ‘Which is this that you want?’

6.4.2.3 The co-occurrence of the interrogative **-he** and nominal modifiers with a neutral semantic feature of (in)definiteness

Regarding its co-occurrence with nominal modifiers with an inherent neutral feature concerning (in)definiteness, i.e., the adjective, the possessive, the numeral, and the clausal relative, the interrogative **-he** usually occurs before other nominal modifiers. The interrogative **-he** obligatorily exhibits its determiner pre-prefix while the other nominal modifiers may exhibit it optionally. The co-occurrence of the interrogative and the adjective in (63a) and the clausal relative in (63b) in the following examples illustrate these properties:

- (63) a. **Umuhange uwaah** (u)**munini** wusatuse?
 u - mu-hange u - u - a - he (u) - mu-nini u - satuk - e
 Ppfx-3-pot Ppfx-3-GEN-Q.which (Ppfx)-3-big 3SG-burst-PERF
 ‘Which (specifically) big pot has bursted?’
- b. Ngomba ukubona **igitabo ichaahe (i)chó Geza akunda**?
 n - gomb-a u - ku-bon-a i - ki-tabo i - ki - a - he
 2SG-want-FV Ppfx-INF-see-FV Ppfx-7-book Ppfx-7-GEN-Q.which
 i - ki - ó Geza a -kund-a
 (Ppfx)-7-REL Pn.Geza 2SG-like-FV
 ‘I want to see which book (specifically) that Geza likes.’

The occurrence of the Determiner pre-prefix in the inflectional morphology of the adjective (63a) and the clausal relative (63b) is required for encoding the discourse-pragmatic reading of specificity and contrastive focus. For instance, the occurrence of the Determiner pre-prefix in the inflection of the adjective in (63a) yields the reading that the speaker wants the hearer to identify a particular pot from other implicitly known pots available in the discourse context. The occurrence of the Determiner pre-prefix in the inflection of the clausal relative also encodes the reading of drawing the attention of the hearer to the specific book, among other books, which are implicitly known in the discourse. As discussed previously, the Determiner pre-prefix is posited as a functional category, as the Determiner predicate, introducing a DP predication structure dominating the Focus Phrase.

6.4.3 The interrogative **-ki**

6.4.3.1 Meaning and morpho-syntactic structure

The interrogative **-ki** can be translated into English as ‘what’ and it denotes an unknown referent. It can have different prefixes which can alter its meaning. It is prefixed with the Determiner pre-prefix, and the agreement prefix corresponding to the noun class prefix 7/8 with a meaning ‘what’, as exemplified in (64a-b). The noun class prefixes 7/8 are generally used in *igiHa* when the speaker wants more information of (an) unknown entity/entities. The interrogative **-ki** does not co-occur with the lexical head noun (but with an empty *pro* head) since its meaning expresses an unknown entity:

(64) a. Ugomba kugura **igiki**?
 u - gomb-a ku-gur-a i - ki-ki
 2SG-want-FV INF-buy-FV Ppfx-7-Q.what
 ‘What do you want to buy?’

b. Umo murimo **ibiki**?
 u - mu-o mu - ri - mo i - bi - ki?
 DEMrt-18-MEDIAL 18LOC-be-18CL Ppfx-8-Q.what
 ‘What (things) are there (in)?’

The interrogative **-ki** can be prefixed with a locative 17 agreement prefix. With this morphology, the meaning of the interrogative changes to the English meaning ‘why’. This kind of interrogative does not occur with a lexical head noun, because it is used to denote unknown referent(s). Consider the following example:

- (65) **Kuki** utaagenda kuragira impene?
 ku - ki u - taa -gend-a ku-ragir-a i - n-hene
 17LOC-Q.why 2SG-NEG-go-FV INF-herd-FV Ppfx-10-goat
 ‘Why you do not go to herd goats?’

The interrogative **-ki** can furthermore occur as modifier as complement of the genitive **-a**, encoding a meaning similar to the English ‘what for’. In this structure, the genitive-like interrogative can take an optional Determiner pre-prefix. Unlike other interrogatives formed with the stem **-ki**, the genitive-like interrogative occurs with a lexical head noun. The following examples illustrate these properties:

- (66) a. Uzanye inkoko **(i)y’iki**?
 u - zan - e i - n-koko (i) - i - a - i - ki
 2SG-bring-PERF Ppfx-9-hen (Ppfx)-9-GEN-9-Q.what
 ‘You have brought a hen specifically for what?’
- b. Usize umusego **(u)w’iki**?
 u - sig - e u - mu-sego (u)- u - a - i - ki
 2SG-leave-PERF Ppfx-3-pillow (Ppfx)-3-GEN-5-Q.what
 ‘You have left a/the pillow for what?’

Syntactically, the interrogative **-ki** usually occurs in the object position. However, the interrogative **kuki** ‘why’ usually occurs in the subject position. The genitive interrogative can occur with the lexical head noun and occupies the post-nominal position. This genitive interrogative exhibits an optional Determiner pre-prefix when it occurs after the lexical head noun, and it exhibits an obligatory Determiner pre-prefix when occurs with a phonologically empty *pro* head. Consider the following examples:

- (67) a. Ugomba **umupira (u)w’iki**?
 u- gomb-a u- mu-pira (u)- u- a- i- ki
 Ppfx-want-FV Ppfx-3- ball (Ppfx)-3-GEN-5-what
 ‘Do you want a ball (specifically) for what?’
- b. Speaker A: Nzanira umukoba wanje.
 n- zan- ir- a u- mu-koba u - a- nje
 1SG-bring-APPL-FV Ppfx-1-bag 3-GEN-me
 ‘Bring me my bag.’
- Speaker B: Ugomba **uw’iki**?
 u- gomb-a u- u - a - i - ki
 Ppfx-want-FV Ppfx-1-GEN-5-what
 ‘Why do you need her/him?’

Semantically, the interrogative **-ki** denotes that referents are indefinite and non-specific. Its indefiniteness interpretation expresses the reading that the interrogative **-ki** denotes unknown referent(s). In posing questions using the interrogative **-ki**, the speaker has no particular referent in mind. For instance, in (67a) above, the speaker does not know what thing the hearer wants to buy. Thus, s/he uses the interrogative **igiki** ‘what’ so that the hearer can specify the thing he/she wants to buy.

The same interpretation can be realized in the utterance in (67a) if the genitive interrogative **-ki** occurs without a Determiner pre-prefix. As has been argued throughout the current study, the occurrence of the Determiner pre-prefix is associated with the reading of specificity and contrastive focus. In the examples in (66a-b), the occurrence of the Determiner pre-prefix in the inflection of the genitive interrogative encodes the reading that the speaker is asking the specific reason for the hearer to request a ball.

In the discourse context where the genitive interrogative **-ki** appears without the lexical head noun in (67b), the DP is interpreted as having an anaphoric reading because the referent **umukoba** ‘bag’ is already established in the preceding utterance. Therefore, in this context, the determiner encodes the feature of definiteness. In addition, the occurrence of the obligatory Determiner pre-prefix entails that the speaker has the specific referent in mind. The occurrence of Determiner pre-prefix, furthermore, entails the reading that Speaker B is aware of the presence of several reasons why Speaker A is demanding his bag. Thus, Speaker B, through using the obligatory Determiner pre-prefix expresses the meaning of guiding Speaker A to identify the specific reason why s/he is demanding to be given his bag, among other implicitly known alternatives. As was done for other nominal modifiers, the Determiner pre-prefix occurring in the inflection of the interrogative **-ki** occurring as complement of the genitive **-a** is also posited as a functional category Determiner predicate, introducing a DP predication projection above the Focus Phrase, representing the restrictive and focus-related interpretation of the modifier.

6.4.3.2 The co-occurrence of the interrogative **-ki** and nominal modifiers with the semantic feature of definiteness

Unlike other indefinite interrogatives in igiHa, the interrogative **-ki** may occur with other nominal modifiers with the semantic feature of definiteness, including the demonstrative. In this co-occurrence the interrogative **-ki** is usually in the object position. In this occurrence, the demonstrative usually occurs before the interrogative **-ki**. The genitive interrogative exhibits the optional Determiner pre-prefix. Consider the following examples:

- (68) a. Ugomba **umuti uwu w'iki**?
 u - gomb-a u - mu-pira u - u - Ø u-i-ki
 2SG-want-FV Ppfx-3-drug DEMrt-3-PROX 3-5-Q.what
 'Do you want this drug for what?'
- b. Ugomba **umupira uwu uw'iki**?
 u - gomb-a u - mu-pira u - u - Ø u - u-i-ki
 2SG-want-FV Ppfx-3-drug DEMrt-3-PROX Ppfx-3-5-Q.what
 'Do you want this drug specifically for what?'

The igiHa demonstrative, as argued in Chapter Four bears the semantic features of definiteness and specificity. The occurrence of the proximal demonstrative **uwu** 'this' yields the referent identifiable. The semantic feature of identifiability, as postulated by Lyons (1999) gives rise to the definiteness interpretation of the DP in (68a). The demonstrative further expresses the semantic feature of specificity to the DP, whereas the realization of the optional Determiner pre-prefix in the inflection of the genitive interrogative in (68b) encodes additional emphasis to the referent, that is associated with a reading of contrastive focus. I posit the Determiner pre-prefix occurring in the morphology of the interrogative modifier in (68b) as a functional category Determiner predicate (D_{Pred}), introducing a DP predication structure representing the restrictive and predicative interpretation of the modifier.

6.4.3.3 The co-occurrence of the interrogative **-ki** and nominal modifiers with a neutral feature of (in)definiteness

Like other interrogatives, the interrogative modifier **-ki** can co-occur with other nominal modifiers that possess a neutral feature regarding (in)definiteness. This co-occurrence is usually exemplified in the object position. In this co-occurrence, the interrogative **-ki** occurs after the other nominal modifiers. In addition, the inflection morphology of both the nominal modifier

with a neutral feature of (in)definiteness and the genitive interrogative **-ki** exhibit an optional Determiner pre-prefix. The following example where the interrogative **-ki** co-occurs with the adjective illustrates these properties:

- (69) Ugomba kugura **urupanga (u)runini (u)gw'iki?**
 u - gomb-a ku-gur-a u-ru-panga (u) - ru-nini (u) - ru-i-ki
 2SG-want-FV INF-buy-FV Ppfx-11-machete (Ppfx)-11-big (Ppfx)-11-5-Q.what
 'Do you want to buy the (specifically) big machete (specifically) for what?'

The occurrence of the Determiner pre-prefix in the inflection of either the adjective **runini** 'big' or the genitive-like interrogative **gw'iki** 'what for' encodes the feature of specificity, which further interacts with the information structural feature of contrastive focus. The Determiner pre-prefix is posited as a functional category D_{Pred} , introducing the DP predication projection that represents the restrictive and predicative interpretation of the modifier.

6.5 Summary

This chapter examined the morpho-syntax of the quantifier, enumerative, and interrogative categories that occur as nominal modifiers in the igiHa DP. It furthermore examined the discourse-pragmatic interpretations in contexts where they modify the lexical head noun and when they co-occur with other nominal modifiers. All nominal modifiers examined in this chapter exhibit a morphological structure that includes an agreement with their lexical head noun, except for the distributive quantifier **huri** which occurs as a free element.

Regarding the discourse-pragmatic interpretation of the DP containing these nominal modifiers, the quantifier **-óóse**, 'all/both/whole', **huri** 'every/each', and **-sa** 'only' have been postulated to possess an intrinsic semantic feature of definiteness based on the inclusiveness notion as proposed by Lyons (1999). This chapter has also postulated that the emphatic pronoun inherently expresses features of definiteness and specificity. The quantifier **-o-ose** 'any' has been postulated as possessing an inherent feature of indefiniteness for lacking the inclusiveness factor. Regarding, enumeratives, the chapter has established that stems such as **-ndi** 'another/other', **-mwe** 'some/certain', and **-enshi** 'many/much' are inherently indefinite, though they may co-occur with other definite and specific modifiers. The final modifier examined in this chapter was the interrogative. I argued that interrogatives such as **-nde** 'who/whom', **-nte** 'how' **-ki** 'what',

are inherently indefinite, although they can co-occur with other modifiers that denote readings of definiteness, specificity, and contrastive focus.

CHAPTER SEVEN

SUMMARY AND CONCLUSION

7.1 Introduction

This chapter presents a synthesis of the preceding chapters of this dissertation by summarizing the major findings that emerged from each chapter. Broadly, this study was motivated by the questions of how the head noun and modifiers in the igiHa nominal structure exhibit the pre-prefix optionally or obligatorily. Assuming the Minimalist Program framework of generative syntax, and its interface properties in a broader multi-perspective approach, I postulated that this optionally or obligatorily realized pre-prefix is a functional category Determiner. In regard to its semantic features, this Determiner pre-prefix has been viewed in various ways by scholars. Some scholars argued that the (non-)occurrence of the determiner pre-prefix in some Bantu languages is associated with the semantic features of (in)definiteness and (non-)specificity. Other scholars argued that the semantic features of (in)definiteness and (non-)specificity are not associated with the determiner pre-prefix. This study was conducted to examine the morpho-syntactic realizations and the discourse-pragmatic properties of the Determiner pre-prefix in the nominal domain of igiHa.

This chapter is organized into five sections. Following section 7.1, is the introduction of this chapter, section 7.2 is devoted to the summaries from the main chapters of this study, namely Chapters Two, Three, Four, Five, and Six. Section 7.3 gives an overview of the theoretical framework assumed in the current study. Section 7.4 presents some views on areas that can be recommended for further research relating to definiteness and specificity in other syntactic domains.

7.2 Summary of the chapters

In this section, the summaries of the respective main chapters constituting this study are presented, identifying the major findings made in each chapter. The aim is to synthesize the findings of the various chapters to present a unified synthesis of the research conducted, and contribution made by this dissertation, to the field of DP syntax for igiHa, and Bantu languages exhibiting the pre-prefix (augment), more generally.

7.2.1 Chapter One

Chapter One of the current study presented the introduction. This chapter discussed the background and rationale for the research on DP syntax. It also outlined the research objectives and research questions that informed the research. The chapter discussed, in addition, the research problem, arguing for the necessity of examining the associated semantic and discourse-pragmatic interpretations of the optional or obligatory occurrence of the determiner pre-prefix in igiHa nominal domain. Chapter One, furthermore, outlined the theoretical framework of the study, in which the multi-perspective theoretical framework adopted, was discussed. The chapter explained that the study assumes the generative framework, including Chomsky's Minimalist Program, Cartographic studies (Rizzi, 1997), and the semantic theories of Definiteness and Specificity of Lyons (1999). The Cartography Studies framework, which approaches a Topic Phrase and Focus Phrase in its architecture was viewed to relate the Minimalist Program with information structure theory. Lyons's (1999) theory of Definiteness and Specificity was discussed. The information structural notions of Topic and Focus postulated by Lambrecht (1996) and the views on information structure in DP of Aboh et al. (2010) were introduced. This chapter briefly introduced the notion of contrastive focus, as posited by Repp (2010, 2016). Chapter One, in addition, outlined the research methodology employed in this study. It was stated that the data for the research was mainly obtained from introspection since the researcher is a native speaker of igiHa. For the purpose of confirming judgments made from the researcher's linguistic intuitions, the introspection method was supplemented with informal discussions of data with some other native speakers of igiHa. In addition, selected texts from the Bible were examined for identifying relevant data. With regard to the ethical clearance protocol, it was indicated that this study entailed a very low or no risk, hence it was exempted from the ethical clearance procedures.

7.2.2 Chapter Two

Chapter Two presented the multi-perspective theoretical framework assumed in this study. It discussed views on the interface of syntactic and semantic theories from studies within the broad generative approach. Chapter Two discussed the main principles and properties of the Minimalist Program, as postulated by Chomsky (1995) and subsequent works. The Chapter discussed various perspectives from research on the DP Hypothesis, originally postulated by Abney (1987),

which introduced functional categories the head of the DP projection of the nominal phrases. In addition, Chapter Two discussed the salient properties of the Cartographic studies framework, as advocated by Rizzi (1997) and Cinque and Rizzi (2008). The Cartographic studies framework posits Topic and Focus Phrases in the clausal left periphery linked to the information structural notions of Topic and Focus. Thus the study included as part of its multi-perspective framework, the information structure theory postulated by Lambrecht (1996), and perspectives from Repp (2010, 2016) concerning contrastive focus, in particular the notions of explicit alternatives, explicit alternative set, and implicit set. These perspectives were invoked to complement Lyons's (1999) semantic theories of Definiteness and Specificity.

7.2.3 Chapter Three

Chapter Three reviewed selected previous studies regarding the NP/DP syntax in article-less languages. The chapter reviewed both typological studies and theoretical studies concerning the nominal domain in languages with no overt determiners as in for example, English. With respect to typological studies, the chapter focused on the determiner elements that occur within the nominal domain. It discussed the views of scholars on the order of elements occurring in the noun phrase. In this regard, it was pointed out that noun phrases in Bantu languages are head-initial and that they can include various numbers of modifiers. The studies reviewed in this chapter demonstrated that languages differ in the number and the order of the elements that constitute the nominal domain.

With regard to the theoretical accounts of the nominal expression in article-less languages, the chapter reviewed selected studies concerning the debate within Generative syntax on whether noun phrases in the so-called selected article-less languages project a DP above an NP, similarly to languages like English with overt articles. The literature studies reviewed in this chapter indicated that article-less languages provide evidence for a DP projection account. The chapter furthermore reviewed selected studies that addressed the semantic and pragmatic interpretation of DPs. These studies demonstrated how DPs can express the semantic features of (in)definiteness and (non-)specificity. In this regard, languages differ in the way they encode the semantic features of (in)definiteness and (non-)specificity. Furthermore, the chapter discussed selected studies on the information structural notions of Topic and Focus. The studies demonstrated that information structural notions of Topic and Focus can be projected as heads of

phrasal projections, and that the notions of Topic and Focus are represented differently among languages. In some languages, Topic and Focus can be represented segmentally, whereas in other languages suprasegmentally or both segmentally and suprasegmentally. This chapter provided the theoretical background for the analytic chapters of this dissertation regarding the investigation of the Determiner phrase and its associated semantic-pragmatic interpretation in the DP syntax of igiHa.

7.2.4 Chapter Four

Chapter Four examined the nominal modifiers viewed as inherently bearing semantic features of definiteness and specificity. This chapter included the demonstrative and the anaphoric determiners **-áá**, **-á-ndi**, and **nya-**.

The chapter examined the morpho-syntactic structure of the igiHa demonstrative and its associated discourse-pragmatic interpretations in the noun phrase. The demonstrative in igiHa was argued in this chapter to possess inherent features of definiteness and specificity, as is generally the case in Bantu languages. The chapter identified five spatial positions of the igiHa demonstrative (cf. Table 1). The noun phrase containing the demonstrative was argued to have the semantic features of definiteness and specificity. It was demonstrated that the usual syntactic position of the demonstrative in igiHa is the position of the lexical head noun. The demonstrative occurring in this position is argued to have deictic functions. However, it was demonstrated that the demonstrative can occur in the pre-nominal position, where it serves an anaphoric function. Since demonstratives were viewed to include features of the determiner category, the pre-nominal demonstrative canonically has the effect that the pre-prefix in the inflection of the lexical head noun is omitted. However, it was also demonstrated that the pre-nominal demonstrative can occur with a head noun retaining the determiner pre-prefix, which in this instance, is associated with the additional feature of specificity and contrastive focus. It was postulated that the igiHa demonstrative can occur with a phonologically empty noun, a pro head in the context where the referent is well known among the discourse participants and possibly already mentioned in the preceding utterance. In this occurrence it encodes an anaphoric reading, hence refers to a referent which is definite and specific.

The chapter furthermore examined the co-occurrence of the demonstrative and other nominal modifiers with a neutral feature of (in)definiteness and (non-)specificity. The nominal expressions exemplifying this co-occurrence are postulated to be definite and specific. It was posited that the demonstrative in igiHa occurs in the DP projections where it occurs in the SpecD position.

With regard to other anaphoric determiners, the chapter demonstrated that their morphology exhibits an agreement prefix corresponding to the noun class prefix of their nouns. The anaphoric determiner **-áá** was proposed to canonically occur in the pre-nominal position, with an optional determiner pre-prefix occurring in the inflection of the lexical head noun. The determiner pre-prefix was postulated as encoding additional specificity and contrastive focus. The anaphoric determiner **-á-ndi**, on the other hand, was postulated to occur strictly with a phonologically empty noun, a *pro* head, and is interpreted as having a reading of both features of definiteness and specificity. Similarly, the anaphoric determiner **nya-** which occurs in the inflection of the lexical head noun, like a clitic, was argued to be in complementary distribution with the determiner category pre-prefix. It is interpreted as having anaphoric inference, with features of definiteness and specificity.

7.2.5 Chapter Five

This chapter examined the morph-syntactic structure of the nominal modifiers in igiHa that are viewed to have inherently neutral features of (in)definiteness and (non-)specificity. These modifiers include the adjective, the numeral, the clausal relative, and the possessive. All of these modifiers realize morphology that agrees with the noun class prefix of the modified lexical noun. All the nominal modifiers analyzed in this chapter were demonstrated to canonically occupy the position after the lexical head noun. These nominal modifiers may realize an optional determiner pre-prefix when they occur in the post-nominal position. This determiner pre-prefix occurring in the inflection of these nominal modifiers was postulated to encode the semantic features of specificity and the information structural feature of contrastive focus.

It was demonstrated that the adjective, the numeral, the clausal relative, and the possessive can occur in the pre-nominal position with an obligatory determiner pre-prefix. In this instance, the chapter argued that the referent is interpreted as being familiar to the interlocutors and that if the

lexical head noun is preceded by the prosodic pause, it expresses an element in apposition or afterthought. The determiner pre-prefix occurring obligatorily in the inflection of these nominal modifiers is interpreted with a feature of specificity. In addition, the determiner pre-prefix interacts with the prosodic pause to manifest the information structural feature of contrastive focus. The chapter argued that the Determiner pre-prefix occurring on the inflection of nominal modifiers such as the adjective, the numeral, the clausal relative, and the possessive is postulated as the Determiner predicate (D_{Pred}) which heads the Determiner Phrase predicate (DP_{Pred}) above the Focus Phrase.

7.2.6 Chapter Six

This chapter examined the morpho-syntactic structure of the quantifier, the enumerative, and the interrogative modifiers. The chapter also examined the discourse-pragmatic interpretation associated with the (non-)occurrence of the determiner pre-prefix in the morphology of these nominal modifiers.

Concerning the igiHa quantifier, it was demonstrated that only the distributive **huri** does not realize the morphology that agrees with the lexical head noun. The quantifier **-óóse** ‘all’, **-o-o-se** ‘any’, and **-sa** ‘only’ was postulated as normally occurring in the post-nominal position. However, the chapter demonstrated that these quantifiers can occur in the pre-nominal position, followed by the prosodic pause, in which case they possess an inherent feature of definiteness. In this section, the emphatic pronoun which realizes agreement morphology with the lexical head noun was argued to be definite and specific. The chapter examined the co-occurrences of quantifiers and other nominal modifiers with a neutral feature of (in)definiteness, including the adjective, the numeral, the clausal relative, and the possessive. It was demonstrated that other nominal modifiers can take an optional determiner pre-prefix. This determiner pre-prefix was proposed to manifest features of specificity and contrastive focus. It was proposed that the restrictive and predicative interpretations of modifiers realizing the determiner pre-prefix is structurally represented by a Determiner predicate (DP_{Pred}) head of the DP predication, DP_{Pred} above the Focus Phrase.

This chapter presented the morpho-syntax of the enumerative modifiers **-enshi** ‘many’, **-mwe** ‘some’, **-ndi** ‘other’, **nyene** ‘oneself’, and **nka-** ‘similar/like’. The enumerative nominal

modifiers exhibit agreement morphology with the noun class prefix of the head noun. The usual syntactic position of enumeratives is after the lexical head noun. It was demonstrated that among these enumeratives, the enumerative **-enshi**, and **-mwe** can exhibit an optional determiner pre-prefix, similarly to other nominal modifiers such as the adjective, the numeral, the possessive, and the clausal relative. When any of these enumeratives occur in the pre-nominal position it exhibits an obligatory determiner pre-prefix, and the enumerative is immediately followed by the prosodic pause. The determiner pre-prefix occurring in the morphology of these enumeratives was argued to encode features of specificity and contrastive focus. It was proposed that this determiner pre-prefix occurring on the inflection morphology of the enumerative nominal modifiers is a functional category D_{Pred} introducing the DP_{Pred} . The chapter also examined the co-occurrence of the enumerative modifiers with other nominal modifiers, first with modifiers having the semantic feature of definiteness, and later with modifiers having a neutral semantic feature of (in)definiteness.

Another group of nominal modifiers examined in this chapter was interrogatives. The chapter examined the morpho-logical structure of the four interrogative elements in their occurrence as nominal modifiers, namely **-he** ‘which one’, **-nde** ‘who’, **-nte** ‘how’, and **-ki** ‘what’. It was demonstrated that these interrogative modifiers exhibit a morphological structure that exhibit agreement with the noun class prefix of the lexical head noun. Regarding the semantic-pragmatic interpretation, it was proposed that the *igiHa* interrogative nominal modifiers have an inherent feature of indefiniteness. However, it was demonstrated that despite their inherent feature of indefiniteness, they can occur in definite contexts if they co-occur with other nominal modifiers.

7.3 Theoretical contribution of the study

This study assumed a multi-perspective theoretical framework conceptualized within a generative syntax approach. This framework comprised of the Minimalist Program, including Abney's (1987) DP Hypothesis, and Lyons's (1999) semantic theory of Definiteness and Specificity. The Cartographic studies framework was invoked in relating the Minimalist syntax to information structure representations.

The DP Hypothesis posits that nominal expressions are structurally represented as a Determiner Phrase headed by the functional category Determiner dominating the noun phrase. This study

argued that the properties of the demonstrative and the definite quantifiers provide evidence for the postulation of a DP projection above NP for igiHa. It was proposed that the anaphoric determiners are functional categories that head the DP projection. The demonstrative and anaphoric determiners were viewed in this study to have intrinsic semantic features of definiteness and specificity.

The study proposed that the pre-prefix occurring in the inflectional morphology of the lexical head noun and the inflection of some nominal modifiers are the functional category Determiner, specified for the features of specificity and contrastive focus. Thus, the pre-prefix was postulated as the Determiner head of the DP projection.

Invoking perspectives from information structure, it was proposed that the feature of specificity interacts with contrastive focus. This view supports the view expressed by Aboh et al. (2010) that information structure can be expressed in the noun phrases, as in the clause. It was proposed that the Determiner pre-prefix occurring obligatorily or optionally in the inflection morphology of a lexical head noun is an element that encodes the information structural feature of contrastive focus in the noun phrase if preceded by a demonstrative. Thus, the Determiner pre-prefix which encodes the information structural feature of contrastive focus was posited to interact with the Focus Phrase projection headed by the Focus head that agrees with the head noun.

This study, therefore, argued that despite the absence of overt definite and indefinite articles in igiHa, it does license a DP projection. The DP projection in igiHa is evidenced by the properties of the optional occurrence of the noun pre-prefix with the postulation of the demonstrative, anaphoric determiner, definite quantifiers, and the (non-)occurrence of the determiner prefix in the inflectional morphology of various nominal modifiers. Thus the determiner pre-prefix is viewed as a functional category that heads DP projections.

7.4 Areas for further investigation

This research was conducted for the igiHa nominal domain. It investigated the morphological and syntactic structures of the elements occurring in the DP, including the canonical and non-canonical word order properties of the elements occurring in the nominal domain. The study posited that modifiers such as demonstratives, and some quantifiers occupy the post-nominal position in the NP dominated by the Determiner Phrase projection. The study examined the

semantic-pragmatic interpretations associated with the (non-)occurrences of the Determiner pre-prefix in the inflection of the lexical head noun and nominal modifiers. It was postulated that the pre-prefix, is a functional determiner category, specified for the semantic-pragmatic features of specificity and contrastive focus.

Although this study focused on the nominal domain, i.e., DP syntax of igiHa, another aspect regarding the noun pre-prefix which was not examined in this study merits research, i.e., the relationship between the noun pre-prefix and animacy effects and obligatorily object agreement prefix in the verbal morphology. For instance, Vitale (1981) asserts that in Kiswahili (a non-pre-prefix language), the obligatory object marker is associated with animacy. In addition, Mursell (2021) argues that the object marking in Kiswahili is not associated with semantic features of definiteness and specificity or animacy. He argues that object marking in Kiswahili is rather associated with the notion of topic. In this regard, further investigation is recommended to examine how object agreement is realized in the clausal domain in igiHa, and how it may encode definiteness and specificity properties, and possibly contrast.

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