

# **A Language without Articles: The case of Magahi**

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**DEEPAK ALOK**



**Centre for Linguistics  
School of Language, Literature & Culture Studies  
Jawaharlal Nehru University  
New Delhi  
INDIA  
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Date: 20<sup>th</sup> July, 2012

DECLARATION BY THE CANDIDATE

This dissertation titled “**A Language without Articles: The case of Magahi**” submitted by me for the award of the degree of Master of Philosophy, is an original work and has not been submitted so far in part or in full, for any other degree or diploma of any University or Institution.

**(DEEPAK ALOK)**  
**M. Phil Student**  
**CL/SLL&CS**  
**JNU**



**Centre for Linguistics**  
**School of Language, Literature & Culture Studies**  
**Jawaharlal Nehru University**  
**New Delhi-110067, India**

Date: 20<sup>th</sup> July, 2012

**CERTIFICATE**

Certified that the dissertation titled “**A language without Articles: The case of Magahi**” submitted by **DEEPAK ALOK** to the Centre for Linguistics, School of Language, Literature and Culture Studies, Jawaharlal Nehru University, New Delhi, for the award of the degree of **Master of Philosophy**, is an original work and has not been submitted so far in part or in full, for any other degree or diploma of any University or Institution.

This may be placed before the examiners for evaluation for the award of the degree of Master of Philosophy.

(DR. AYESHA KIDWAI)

SUPERVISOR

(PROF. VAISHNA NARANG)

CHAIRPERSON

**Gram:** JAYENU,

**Tel:** 26704231,

**FAX:** 91-011-26165886

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## Abbreviations

|          |                               |
|----------|-------------------------------|
| Adj/Adjs | Adjective/Adjective           |
| AdjP     | Adjective Phrase              |
| AGG      | Aggregative marker            |
| Cla/CL   | Classifier                    |
| ClaP     | Classifier Phrase             |
| Dem/Dems | Demonstrative/ Demonstratives |
| DemP     | Demonstrative Phrase          |
| F        | Feminine                      |
| FOC      | Focus                         |
| GEN      | Genitive                      |
| M        | Masculine                     |
| N        | Number                        |
| Num      | Numeral                       |
| NumP     | Numeral Phrase                |
| PL       | Plural                        |
| Poss     | Possessive                    |
| PossP    | Possessive Phrase             |
| PP       | Postposition                  |
| PROG     | Progressive aspect            |

|      |                        |
|------|------------------------|
| PRS  | Present                |
| PRT  | Particle               |
| PST  | Past                   |
| Q/Qs | Quantifier/Quantifiers |
| QP   | Quantifier Phrase      |
| SG   | Singular               |
| SUF  | Suffix                 |
| TOP  | Topic                  |

*Dedicated*

*to*

*My family and friends*



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# Chapter 1

## Introduction

The noun phrase is headed by a functional element (i.e., “non-lexical“ category) D, identified with the determiner. The analysis in which D heads the noun phrase I call the “DP-analysis.”  
(Abney 1987:3)

It would be very peculiar to assume that Swedish and Norwegian are so different from Danish to display an extra projection of DP to be inserted at some point in the structure. Furthermore, such an assumption would miss important general properties of the structure of noun phrases across languages.  
(Giusti 1992:18)

In the last three decades, researchers have shown great interest in the syntax and semantics of the nominal domain and significant observations regarding the working of the nominal structure have been made. All this research has been crucially motivated by the existence of the “DP-hypothesis” (Abney 1987) and influenced by the theoretical developments that took place within generative grammar.

A number of questions have been raised regarding the status of the determiner elements found within the DP, in particular, the position and interpretation of (in)definite articles and other D-items such as demonstratives, possessives etc. Should the DP-analysis relate to all noun phrases in every language? If there is evidence for some structures to be DPs in a given language, does it mean that all noun phrases in that language should be associated with a DP (Rappaport 2001)? The core assumption of DP-hypothesis is that an NP is dominated by a DP, but there are languages which do not have articles. What could be the possible analysis of those languages which lack an overt article? Do they lack a D projection altogether, or must a null D be postulated for these languages?

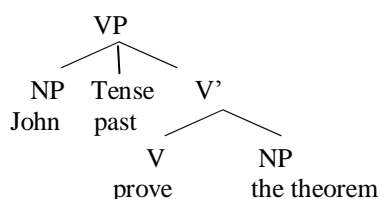
Recent research has also investigated the layering of other functional projections in the noun phrase. Usually, these layers are motivated by the morphological markers that occur in the noun phrase, but it is an important question nevertheless – is morphology always a reliable marker? How many such projections can be assumed in a nominal domain, how can they be motivated, and what are their interpretative properties (Alexiadou, Haegeman and Stavrou (2007))?

This thesis investigates these questions by examining a language without articles – Magahi. In this introductory chapter, I present a brief historical overview of the issue whether all noun phrases are DPs, and the range of functional projections that layer the noun phrase, and then move on to discuss the aims of the thesis.

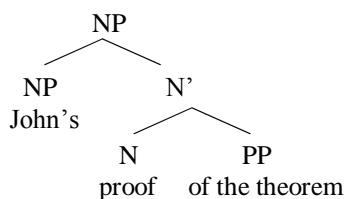
## 1.1 A Brief Historical Overview

The noun phrase structure has attracted considerable attention within the generative grammar, with the work of Lees (1960). Chomsky (1970) began a tradition of analysis of the nominals with major focus on their functional structure. He observes a sort of similarity between a clausal structure and the structure of a noun phrase that undergoes the process of nominalization. He represents the noun phrase structure as a clause. Within this framework, a noun forms a phrase of its own and is lexically headed by the noun itself. For example, the clause *John proved the theorem*, and the noun phrase *John's proof of theorem* have the similar structure as shown in (1).

(1) (a)



(b)



Like the verb *prove* in (1a), the noun *proof* in (1b) takes John ('s) as its subject and (*of*) *the theorem* as its complement.

Extending this tradition, interesting parallelisms have been observed between the nominal domain and the clause by Szabolcsi (1983) and Abney (1987). As the semantic heads of clauses are verbs, the semantic heads of noun phrases are nouns. Clauses are the extended projection of a verb (in the sense of Grimshaw (1991), cited in Alexiadou et al (2007)). In other words, the VP is dominated by a number of functional projections as presented in (2a) under X-bar schema. In a

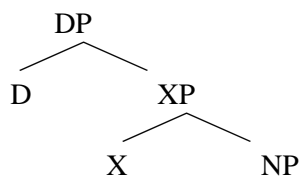
similar manner the noun phrases are dominated by a functional projection such as DP as shown in (2b).

- (2) (a) CP → SPEC C'  
       C' → C IP  
       IP → SPEC I'  
       I' → I VP
- (b) DP → SPEC D'  
       D' → D NP

Szabolcsi (1983) shows the similarity between DPs and clauses on the basis of the similar behavior of possessors and determiners in Hungarian. She claims that there is a detailed parallelism between the structures of noun phrases and clauses, involving inflection, possessor extraction, and function of articles as complementizers. Abney (1987) proposes a determiner element D as the functional head of the noun phrases. The DP hypothesis postulates that just as the projection of verbs is dominated by functional categories, the projection of the noun is also dominated by the functional category 'D', such that it is D, rather than the noun itself, that is the head of the noun phrase. Moreover, just as the V is assumed to be the head in the clausal domain, the N is the head in the nominal domain. Note, however, that while in Abney's (1987) system D is parallel to I, but in Szabolcsi's (1989) system D perform the role of the complementizer in the nominal domain as is done by the complementizer position 'C' in a clause i.e. D is parallel to C.

Later research focuses on the region between the DP and the NP. Many researchers have proposed several different functional projections in addition to DP and assume the following three-layered DP structure as in (3):

(3)



The intermediary projection XP between DP and NP has been analyzed as a different projection in different languages: NumP in Hebrew (Ritter 1991) and French (Bernstein 1993), KP in

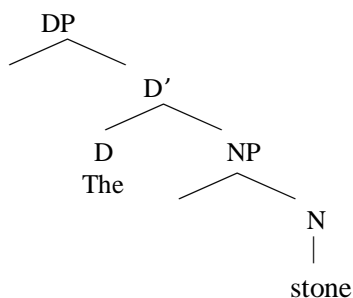
Chinese Tang (1990), BadgeP in Bangla (Bhattacharya & Dasgupta 1996) QP in Romanian (Giusti 1991), German (Löbel 1989) and Bangla (Bhattacharya 1999)

Since the assumption of DP hypothesis NPs have been reinterpreted in terms of DP. That is, the determiner has a central role in the nominal system. A number of languages belonging to different language families have been studied within this framework. Assuming the assumption for the sake of uniformity that all languages share the same underlying phrase structure (Kayne 1994), DPs should be projected both in languages that have articles and in those that do not. In other words, DP is a universal projection and all languages, including article-less languages have overtly or covertly realized DP i.e. the difference between article languages and article-less languages is that there is null D in latter (Longobardi 1994, Borer 2005 among many others). The difference between the English phrase ‘*The stone*’ in (4a) and SC *Kamen* ‘stone’ in (4b) is that there is a null D in SC (4a and 4b are from Bošković (2008)) as shown in (5).

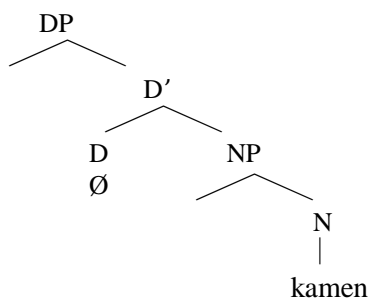
(4) (a) The stone broke the window.

(b) kamen je razbio prozor.  
stone is broken window

(5) (a)



(b)



However, the hypothesis that not all noun phrases in all languages are DPs also exists. Corver (1992), in this regard developed an interesting and influential proposal. According to him, configurational structure of nominal phrases decides whether or not they allow the extraction of prenominal phrases out of the nominal domain. He argued that it is the DP projection which blocks the extraction of prenominal phrases in English. The languages which permit this extraction are characterized by the absence of this functional category (Corver 1992). Zlatić (1997) develops Corver's idea that the existence of DPs is a parameter of variation across languages and argues strongly that there is no evidence for a DP in SC. Moreover, she suggests that DPs are found only in languages with articles. Thus, the presence versus absence of a DP is a cross-linguistic variable, a parameter of variation.

Other scholars too have argued against the universality of a DP projection and have argued for a "no-DP analysis" of article-less languages – Chierchia (1998), Cheng and Sybesma (1999), Willim (2000), Baker (2003), Dayal (2004, 2009), Bošković (2005a, 2005b, 2008 & 2010a, 2010b). In addition to these, some scholars raise a question on the existence of D as a head. Bruening (2009) claims that selectional asymmetries between CP and DP indicate that the head of the CP is in fact the C; but the head of nominal elements is not D, it is N. Jenks (2011) argues that while bare nouns do not project a DP, noun phrases, which include classifiers, do in Thai.

Bošković (2005a, 2005b, 2008, 2010a, 2010b) argues that there is a fundamental syntactic and semantic difference between article and article-less languages that cannot be reduced to only phonology, that is, overt vs. phonological null article in the noun phrases. In his own words:

“..... there is a fundamental structural difference between the traditional noun phrase (TNP) in English and article-less languages like Serbo-Croatian (SC) that cannot be reduced to phonology (overt vs. phonological null articles). If D is posted for both, we need to mark a radical principled distinction between D in English and D in SC. ... .. they can be captured if there is a DP in the TNP of English, but not article-less languages like SC.”

(Bošković 2008)

These differences are the following (Generalizations from Bošković (2008, 2010a, 2010b)):

- (i) **Left Branch Extraction (LBE):** Only languages without articles may allow LBE.
- (ii) **Adjunct extraction from NP:** Only languages without articles may allow adjunct extraction out of TNPs.
- (iii) **Scrambling:** Only languages without articles may allow scrambling.
- (iv) **Negative Raising:** Languages without articles disallow NR, and languages with articles allow it.
- (v) **Superiority and multiple Wh-fronting (MWF):** MWF languages without articles do not display superiority effects.
- (vi) **Clitic doubling:** Only languages with articles may allow clitic doubling.
- (vii) **Adnominal genitive:** Languages without articles do not allow transitive nominals with two lexical genitives.
- (viii) **Superlatives:** Only languages with articles allow the majority superlative reading.
- (ix) **Head-internal relatives and locality:** Head-internal relatives display island-sensitivity in article-less languages, but not in languages with articles.
- (x) **Polysynthetic languages:** Polysynthetic languages do not have articles.
- (xi) **Focus morphology:** Negative constituents must be marked for focus in NP languages.
- (xii) **Negative concord with complex negative constituents:** The negative concord reading may be absent with multiple complex negative constituents only in DP negative concord languages.
- (xiii) **Quantifier scope:** Inverse scope is unavailable in NP languages in examples like (43).
- (xiv) **Radical pro-drop:** Radical pro-drop is possible only in NP languages.
- (xv) **Number morphology:** Number morphology may not be obligatory only in NP languages.
- (xvi) **Focus adjacency:** Elements undergoing focus movement are subject to a verb adjacency requirement only in DP languages.



(xvii) **Interpretation of possessives:** Possessors may induce an exhaustivity presupposition only in DP languages.

(xviii) **Classifiers:** Obligatory nominal classifier systems are available only in NP languages.

## 1.2 The objectives of this dissertation

This dissertation seeks to investigate the structure and interpretation of noun phrases, with special reference to Magahi. We begin by examining the suitability of analyses of noun phrases that have been proposed by Abney (1987), mainly in the light of the counter-arguments given by Corver (1992), Zlatić (1997), Chierchia (1998), Dayal (2004, 2009), Bošković (2005a, 2005b, 2008, 2010a, 2010b) and others to make the claim that not all noun phrases are DPs, particularly in languages without articles.<sup>1</sup>

The dissertation also aims to provide an account of functional categories in the nominal domain, paying particular attention to whether Magahi contains the same articulated functional architecture as languages with articles. It shows that in Magahi, traditional D-items such as demonstratives and possessives do not exhibit the behaviour that is associated with D-items in languages with articles. The construction in which modifiers (such as numerals) do not combine directly with nouns but followed by classifiers is investigated. In these regard, our main theoretical proposals are drawn from the insights provided by the works of Dayal (2004, 2009) on Hindi bare nominals and Bhattacharya's (1999) analysis of the Bangla noun phrase.

The present work intends to argue that parallel to clauses, noun phrase structures have a left periphery to host A'-movement for serving the function of information structure. The highest layer of Magahi noun has a left periphery occupied by TopicP and FocusP (in line with Guisti's [1996, 2005] split DP hypothesis and Aboh's (2010) proposal that the interface between Information Structure (IS) and Syntax must be the Lexicon). It is a well-known fact that syntax is influenced by the IS, though the relation between these two modules is still not well understood. This study suggests that discourse feature structure such as [+topic] or [+focus] is an optional formal feature, added arbitrarily as LI enters the numeration (Rochemont 1986, Culicover & Rochemont 1991, Kidwai 2000, Guisti 2005, Aboh 2010).

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<sup>1</sup> The dissertation does not argue against the existence of null projections in general, or that all functional projection must have overt exponents. Rather, it argues only against the universality claim for the DP hypothesis (see Payne 1993, & Bruening 2009 for details).

## 1.3 The theoretical framework

### 1.3.1 The Minimalist Program

The Minimalist Program MP (Chomsky 1993, 1995, 2000, 2001) assumes that there are only two levels of representation which are accessible by the interface systems, the PF: the level which is related to the articulatory-perceptual (A-P) system and the LF: the level which is related to the conceptual-intentional (C-I) system. The theory argues that there are two basic components of language, the lexicon, which constitutes the elementary building blocks of the language, and the computational system, which is the structure building system that combines the elementary building blocks into larger units. Under the minimalist approach, the computational system  $CH_L$  maps some array A of lexical choices i.e. numeration N to the pair  $(\pi, \lambda)$ . Chomsky (1995) defines numeration as in (A):

(A) A set of pairs  $(LI, i)$  where LI is an item of the lexicon and  $i$  is its index, understood to be the number of times that LI is selected.

The procedure  $CH_L$  proceeds by selecting a lexical item (LI) from N, reducing its index by one so that the converging derivation is the one for which N is reduced to zero. No new object can be added in the course of computation. A perfect language should meet the condition of inclusiveness:

“Any structure formed by the computation (in particular  $\pi$  and  $\lambda$ ) is constituted of elements already present in the lexical items selected for N; no new objects are added in the course of computation apart from rearrangements of lexical properties (Chomsky 1995).”

Chomsky (2000, 2001, 2004) argues that computational complexity is avoided if languages make one time selection of lexical items (LIs) and store them in a pre-syntactic domain called Lexical Array (LA). Further, in order to reduce the more computational burden, he argues that derivation processes take place phase by phase accessing LIs from LAs.

Every LI comes with three sets of features: phonetic and phonological features, semantic features, and formal or syntactic features. Phonological features are interpreted at PF, and semantic features are interpreted at LF. Furthermore, Chomsky (1995) divides all types of features into intrinsic features and optional features. Intrinsic features are either listed in the LI

or determined by the listed features whereas optional features are added arbitrarily as the LI enters the numeration. In other words, intrinsic features are inherent inseparable parts of lexical items, while the value for optional features can be chosen in the numeration. For example, Gender is considered as an intrinsic feature of the noun, and Number is an optional feature. These features are also divided into interpretable or valued and uninterpretable or unvalued features. MP assumes that the relevant feature must be checked and deleted during the computation for the derivation to converge.

Further, Chomsky (2000, 2001) argues that checking proceeds by establishing an *Agree* relation, which is an asymmetric relation between a Probe and a Goal, thereby eliminating the earlier proposals of the checking relation as *Spec-Head Agreement* (Chomsky 1993) and *feature-movement* (Chomsky 1995). The Probe has uninterpretable features while the Goal has matching interpretable features. For a probe and a goal to Agree: both Probe and Goal must be active. A given probe pursues its c-command domain in search of a goal. A goal is accessible to a given probe only if there is no intervening element with the relevant set of features. The Goal must be the closest instance of the agreeing feature to the Probe. The operation *Agree* eliminates the uninterpretable features on the probe by *valuing* and *deleting* them. In this system, the valuation of unvalued features can be achieved without movement, with the latter being driven by a generalised EPP.

#### **1.4 The basic facts of Magahi**

The dissertation focuses mainly on the Eastern Indo-Aryan language, Magahi. Generally, three distinct varieties of Magahi could be recognized (Verma 1991):

- i. Central Magahi of Patna, Gaya, Hazaribagh (in Bihar);
- ii. South-Eastern Magahi of Ranchi (in Jharkhand and some parts of Orissa);
- iii. Eastern Magahi of Begusarai and Munger (in Bihar).

Magahi is a head-final, wh-in-situ, language. Like other Eastern Indo-Aryan languages, it does not have grammatical gender or number agreement with verbs. Phrase order in Magahi is quite free, even as the SOV order is considered to be the unmarked word order as in other Indo-Aryan languages. Among the main agreement features, Magahi has only person agreement with the verb. However, the most unique feature of Magahi is a special kind of agreement system on the

verb to mark social relations of power and solidarity which are called honorifics (Verma 1991, Verma 2003, Alok 2008, Kumar 2010). The verb may agree with the subject or with the addressee. The language shows considerable syncretism in its nominal inflectional case system, with cases usually marked by postpositions (Verma 2003).

Henceforth, I use the term ‘Magahi’ to refer to the variety spoken in and around Jehanabad and Gaya.

## **1.5 Overview of the dissertation**

The dissertation is divided into four chapters. The primary motive of chapter 2 is to show that there are syntactic and semantic differences between noun phrases of an article language (languages with articles) like English and an article-less language like Magahi. Section 2.1 deals with the approaches to (in)definiteness. It also reviews Dayal’s work (2004, 2009) to show how definiteness is encoded in a well studied Indo-Aryan language, Hindi, thereby providing the basis for my proposal that Magahi shows definiteness by the bare nominals. Section 2.2 deals with the mechanism of definiteness marking in Magahi and argues that Magahi does not have (in)definite articles and definiteness is not expressed by the functional category D in this language. Section 2.3 discusses Bošković’s (2008, 2010a & 2010b) generalization and supports the claim that there is a fundamental structural difference in the noun phrase of English and Magahi.

Chapter 3 discusses the syntax and semantics of Magahi noun phrase. Section 3.1 of the chapter reviews the Bhattachary’s (1999) works of internal structure of Bangla noun phrase. Section 3.2 deals with the syntax and semantics of the different categories of Magahi noun phrases. This section claims that Num and Cla are two separate functional heads in Magahi, and that the Q projects its own functional projection, QP, and is located at the specifier of that projection. The remaining part of the section deals with adjectives (Adjs), demonstratives (Dems) and possessives (Poss), and claims that Dem and Poss are modifiers in Magahi, which project their own functional projections and are generated at the specifier of those projections. Section 3.3 shows that this proposed structure is also consistent with the phase analysis of noun phrase under ‘highest phrase as a phase’ analysis. Section 3.4 discusses inflectional markers, found in Magahi noun phrases and their semantics and pragmatics. Finally, section 3.5 argues that there is a pre-Poss COMP like position in Magahi noun phrases. Specifically, what I propose is that the

first layer of Magahi noun has a left periphery occupied by TopicP and FocusP, similar to Rizzi's (1997) split-CP hypothesis and Guisti's (2005) split DP hypothesis.

Finally, chapter 4 concludes the dissertation and points out the theoretical implications.



## Chapter 2

### **(In)definiteness, D-projection and Magahi Noun Phrase**

The universality aspect of generative grammar states that noun phrases of every language in the world have the same syntactic structure notwithstanding the presence/absence of the articles. As per the assumptions made in the DP hypothesis, determiners play a central role in the nominal system. However, recently a number of questions have been raised regarding the status of the determiner elements found within the DP, in particular, the position and the interpretation of articles. There is a proposal that article-less languages do not project DP as the maximal projection (Corver 1992, Zlatić 1997, Dayal 2004, 2009, Bošković 2005a, 2005b, 2008, 2009, 2010a, 2010b). This chapter is built around three key themes: the extension of the DP analysis to all noun phrases in every language, the realisation of definiteness in languages without a definite article, and the role played by the bare nominals in article-less languages.

The chapter focuses on the grammatical representation of (in)definiteness and its implications for the structure of nominal expressions in Magahi, showing that the universal concept of definiteness is not encoded in the syntactic representation of nominal phrases in this language (i.e. on D). Section 2.1 deals with the approaches to (in)definiteness. It discusses the two most well-known approaches: the approach that analyzes definite noun phrases in terms of unique identifiability (Russell 1905, Kadmon 1987, Abbott 1999) and the one that analyzes definite noun phrases in terms of (non)familiarity (Christophersen 1939, Heim 1982, 1983, 1988, 1991). It also discusses definiteness marking of Hindi, a well-studied Indo-Aryan language (Dayal 1992, 1994, 1999, 2004, 2009, forthcoming). Section 2.2 deals with the mechanism of definiteness marking in Magahi. The section claims that definiteness is shown by the bare nominals in Magahi; therefore there is no DP analysis of Magahi noun phrases. Section 2.3 applies Bošković's (2005a, 2005b, 2008, 2010a, 2010b) generalizations to support the claim that there is no DP analysis of Magahi noun phrases.

## 2.1 (In)definiteness

Definiteness has been studied in various disciplines in a variety of different theoretical frameworks. One of the most well-known approaches in literature is the theory that analyzes definite noun phrases in terms of unique identifiability i.e. uniqueness is the defining property of definite articles (Russell 1905, Kadmon 1987, 1990, Abbott 1999). This theory claims that the use of definite noun phrases needs a referent of the noun phrase to be uniquely identifiable to the hearer i.e. the only entity of that type within the discourse. In Kadmon's (1990) words: "the definite noun phrases refer to a unique set which is the maximal entity of things which fit their descriptive content". A maximal entity is the one that includes all others (see Link 1983, and Landman 1989 for detail). Indefinites differ from definites in not requiring maximality; or, alternatively the semantic of indefinites simply picks out some entity from the domain, while definites takes a set of entities and returns the unique maximal entity in that set.

To see this, consider examples (1) and (2) (based on a diagnostic in Löbner (1985)). In (1), the definite phrases *the dogs* and *the dog* is maximal entity in that set. They thus cannot participate in more than one activity simultaneously while indefinites phrases in (2) pick out some entities, thus different entities can participate in different activities, and there is no contradiction in semantic interpretation. And this is the reason why example (1) is ungrammatical whereas example (2) is grammatical.

(1) (a) \*The dogs are sleeping but the dogs are not.

(b) \*The dog is sleeping but the dog is not.

(2) (a) Some dogs are sleeping but some dogs are not.

(b) Some dog is sleeping but some dog is not.

The second approach analyzes definite noun phrases in terms of (non)familiarity (Christophersen 1939, Heim 1982, 1988, 1991), where (in)definiteness is captured by "novelty" and "familiarity" conditions. This approach argues that the definite noun phrases are known to the hearer, but indefinite noun phrases are not. Christophersen (1939) notes about English definite article that "the speaker must always be supposed to know which individual he (sic!) is thinking of; the interesting



thing is that the article *The* supposes that the hearer knows it too” (Christophersen 1939). In Heim’s (1983) view, while indefinite noun phrases introduce a new variable, definite noun phrases do not – rather they refer to the one which is already introduced in the discourse. Any definite description must signify an unambiguously introduced discourse entity or a common knowledge between the speaker and the addressee. This implies that definite noun phrases presuppose the existence of a referent. In (3), the definite phrase, *the dogs*, does not introduce a new variable; rather it refers to the NP *some dogs*, mentioned previously in the discourse. For example:

(3) I saw some dogs<sub>i</sub>. The dogs<sub>i</sub> were barking.

(4) I saw some dogs<sub>i</sub>. \*Some dogs<sub>i</sub> were barking.

Chafe (1976) has preferred the term *identifiability* over *familiarity*. The term *identifiability* implies that it is not necessary that the hearer knows the referent, but definiteness signals that they are in a position to identify it.

In recent literature, while some scholars have adopted both uniqueness and familiarity as fundamental assumptions, others have argued that neither is. There have also been attempts to derive one from the other (see Heim 1982, Hawkins 1984, 1991 and Abbott 1999). According to Heim (1982), the requirement for uniqueness could be derived from familiarity. Hawkins (1991) gives a nice account of typology of the source of Definiteness. He identifies the sources of *identifiability/familiarity* as follows:

- i. The situation in which an entity is a member of the previous discourse set, that is, where it has already been talked about.
- ii. If an entity is part of the immediate situation of utterance in which the speaker and the hearer find themselves.
- iii. Knowledge shared by people in the same physical location such as the same village, city etc.
- iv. If an entity has a predictable co-occurrence based on community knowledge, it can be identifiable or familiar.

- v. A referent may be considered identifiable/familiar when the relevant information is provided within the definite NP itself, such as a genitive phrase or a relative clause.

There have been many attempts in the literature to simplify the semantics of (in)definiteness by following just one approach; (non)uniqueness/maximality or (non)familiarity/identifiability. But as has been pointed out in the literature, one approach does not account for all the uses of the definite article in a given language (Lyons 1999). I shall discuss Magahi definiteness in the light of the observations made in all these approaches.

### ***2.1.1 The Morpho-syntax of Definiteness***

What differentiates definite from indefinite noun phrases? The simple answer could be the presence of (in)definite articles. The uses of (in)definite articles are considered to be the prototypical way of encoding (in)definiteness in a language. However, Dryer (2011) finds that a large number of languages (198 out of 534 languages) do not use articles at all, nevertheless all of these languages make the semantic distinction between indefinite and definite noun phrases.

Lyons (1999) takes (in)definiteness as semantic or pragmatic in nature. This semantic or pragmatic definiteness is universal, while its *grammaticalization* is language specific (Lyons 1999). Under this assumption, the (in)definite article is one realization of the semantic and pragmatic concept of (in)definiteness. The article thus could be seen to do specific syntactic and semantic functions in the interpretation of the noun phrases. It is analyzed as a head that projects its own functional category i.e. DP. The languages which do not grammaticalize definiteness use different ways to show this semantic or pragmatic phenomenon (Lyons 1999).

Several ways of expressing (in)definiteness have been reported in the literature. For example, Zlatić (to appear) argues that the universal concept of definiteness is not encoded in the syntactic representation of nominal phrases (e.g. DP) in most of the Slavic languages lacking definite and indefinite articles. The linguistic means to express (in)definiteness in these languages are word order, demonstratives, possessives, case distinctions, verbal aspect etc (see Bošković 2008 for a similar claim). Many other languages in the world use suffixes to show definiteness, e.g., the definite suffix in Balkan languages (e.g. Bulgarian) and Mainland Scandinavian languages e.g.

Norwegian, Swedish and Danish (Grohmann 2005). In Bangla, definiteness/specificity is shown by the syntactic movement of NPs to [Spec, QP]. Such leftward movement is triggered by the optional definiteness/specificity feature that classifiers have (see Bhattacharya 1999 for details). Languages, such as Chinese and Hindi, show definiteness by bare nominals (Dayal 2004, 2009). It is these two analyses that I will use to build my analysis of Magahi (in)definiteness. I begin with a discussion with the work of Dayal (2004, 2009).

### 2.1.1.1 Definiteness and Bare nominals in Hindi

Consider the following examples from Dayal (2004) before we proceed to discuss Hindi facts.

- (5) (a) Dinosaurs are extinct.  
 (b) \*The dinosaurs are extinct.  
 (c) \*Some dinosaurs are extinct.  
 (d) \*Fido and Roxy are extinct.
- (6) (a) The dinosaur is extinct.  
 (b) \*A dinosaur is extinct.  
 (c) \* Fido is extinct.  
 (d) \*Dinosaur is extinct

The above English examples show that there are two kind denoting terms in English, the bare plural and the singular definite. The plural kind terms in English cannot be used with overt articles, whereas the singular kind terms are always realized with it. However, this pattern is not followed cross-linguistically. Examples (5) and (6) would be translated in Hindi with a bare nominal in the relevant position, whereas their translation in Italian would have the definite determiner *i* (Dayal 2004). In other words, there are languages in which the definite determiner is used for both singular and plural kind terms (Italian, and Romance in general), and there are also languages (such as Hindi, and also Russian), in which both types of noun phrases are bare.

The cross-linguistic facts thus demonstrate that there is an overlap between the study of kind terms and definiteness. To capture the semantics of kind terms and definiteness, two semantic operations



- (7) kəmre mē cūha hē.  
 room in mouse is  
 ‘There is a mouse in the room.’

Dayal argues that if we apply the familiar diagnostics in above example (7), we see that bare nominals only have weak indefinite readings (from Dayal 2004).

- (8) (a) kəmre mē cūhe nāhī hē.  
 room in mice not are  
 ‘There aren’t any mice in the room.’ *only* > ∃

- (b) muʃ<sup>h</sup>e ləgʈa hē ki kəmre mē cūha g<sup>h</sup>um rəha hē.  
 to-me seems is that room in mouse moving around is  
 ‘It seems to me that a mouse is moving around in the room.’  
*only seem* > ∃

Both examples under (8) have a narrow scope existential reading rather than wide scope existential reading where the bare nominal picks a specific individual out of a set<sup>1</sup>. In addition, a definite interpretation is also possible with certain intonation pattern. Dayal proposes that bare nominals are instead ambiguous between definite and kind denoting terms rather than definite and indefinite.

Moreover, in Hindi, bare nominals can be used with kind denoting terms as well as object-level predicates (Dayal 1992, 1999, & 2004). The use of bare nominals with object level predicates gives the definite interpretation. Example (9) can be interpreted as generic statements about the properties of the dog or a habitual statement about particular dog salient in the discourse.

- (9) kuṭṭe bəhūṭ b<sup>h</sup>ōkṭe hē.  
 dogs lot bark are  
 ‘The dogs/Dogs bark a lot.’

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<sup>1</sup> She claims that bare nominals can only denote a unique individual per situation. The entity denoted by the bare nominal is not based on the common ground. In other words, these are the cases of bare nominal where the familiarity condition is not satisfied. The claim of Dayal is based on the dimension of *(non)-uniqueness* rather than *(non)-familiarity*.

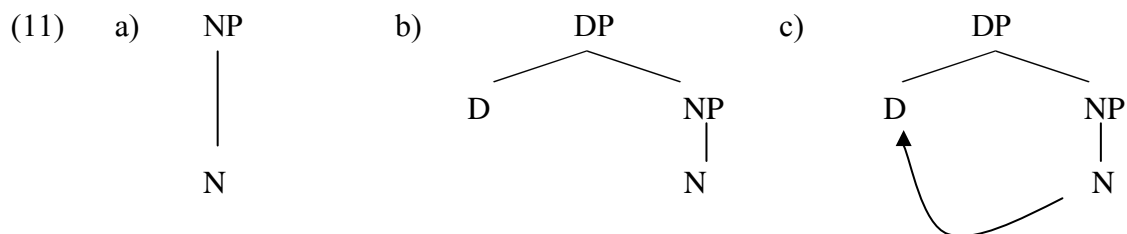
The fact that bare nominals function as definite can also be illustrated by example (10), where the linguistic discourse brings out their anaphoric use.

- (10)     $kuc^h$      $bacce_i$      $an\dot{c}ar$      $aje.$      $bacce_i$      $bahut$      $k^huf$      $t^he.$   
 Some children inside came children very happy were  
 ‘Some children came in. The children were very happy.’

On the basis of the above examples, Dayal claims that besides the relation between kinds and the definite, these bare nominals are genuine kind terms as well as genuine definites in Hindi.

In the standard analysis of bare nominals, common nouns are denoted in the  $\langle e,t \rangle$  domain, with lexical determiners encoding type shift operations required to turn them into the argumental types  $\langle e \rangle$  or  $\langle \langle e,t \rangle, t \rangle$  (Partee 1987, Chierchia 1998). Following this standard view, Dayal (2004) claims that in the DP analysis of noun phrases, NP corresponds to type  $\langle e,t \rangle$ , and DP corresponds to type  $\langle e \rangle$  or  $\langle \langle e,t \rangle, t \rangle$ , with determiners facilitating the requisite shift. The syntax-semantics correlations, however is less clear in the case of bare nominals, which she points out may be analysed in terms of one of the three possibilities:

- i. An NP in which no D is projected as in (11a).
- ii. A full DP with an empty D as in (11b)
- iii. A full DP in which N moves to D as in (11c)



Although the “universal DP” analysis of noun phrases (i.e. all noun phrases must be DP) would only admit the structure of bare noun phrases as either (11b) or (11c), Dayal claims that these structures do not yield an adequate analysis with regards to interpretation in Hindi. For example, consider the contrast that Hindi presents with, say, the Romance languages, which also have bare plurals. While

in Romance, the latter occur only in a few restricted positions; in Hindi bare nominals – either singular or plural – can occur freely everywhere. While the assumption of a null determiner in (11b) can give account of the restricted distribution in Romance, the advantages of doing so for Hindi are less obvious. The null determiners are supposed to require external licensing in these languages. Moreover in Hindi, bare singulars in subject position receive a reference to kind interpretation but in object position, bare singulars may receive existential interpretation; indicating therefore that there is no uniform interpretation accorded to the hypothetical null D.

Dayal proposes, therefore, that it would be plausible to hypothesize a structure like (11a) for bare nominals in languages such as Hindi. In these languages, we have the covert type shift NOM as a repair operation that mediates when a property denoting expression occurs in an argument position (also see Carlson 1977, Partee 1987, Chierchia 1998). Under this view, a language that does not lexicalize NOM/IOTA simply uses it to repair type mismatches when NPs occur as arguments. The possibility of a bare noun phrase structure with N moving to D as in (11c) was suggested by Longobardi (1994, 1999) on the basis of word order facts. Italian permits either the order Det-Adj-N or N-Adj but not \*Adj-N. This fact has been explained by arguing that in languages like Italian, the noun phrase obligatorily projects D and forces N to move to it when no determiner is present. Since these facts are not applicable in languages like English and Hindi, the structure (11a) can be assumed with covert shift NOM rather than the structure (11b) or (11c).

## 2.2 The Magahi Story

In Magahi, there are two forms of nouns which show its typical feature: base form and inflected form. For example, (12a), (13a) and (14a) show the base form of the Magahi nouns whereas (12b), (13b) and (14b) show the inflected form of the same nouns. While the base forms of the nouns are the root forms, the inflected forms are derived by adding the particles *-wa*, *-a*, *-ia* and *-ma*, which Alok (2012) claims are allomorphs of the basic form *-wa*.

- (12) (a) g<sup>h</sup>ər  
           ‘house’

(b) g<sup>h</sup>ər-wa  
house-PRT  
'The house'

(13) (a) g<sup>h</sup>ət̪i:  
'watch'

(b) g<sup>h</sup>ət̪i-a  
watch-PRT  
'The watch'

(14) (a) am  
'mango'

(b) əm-ma  
mango-PRT  
'The mango'

Nouns ending with the vowel sound [i/ i:] take the particle *-a*, as shown in examples (15)-(17). Examples (15a), (16a) and (17a) show the base forms of the nouns while (15b), (16b) and (17b) show the inflected forms of the nouns by the adding particle *-a*.

(15) (a) g<sup>h</sup>ət̪i:  
'watch'

(b) g<sup>h</sup>ət̪i-a  
'watch-PRT'

(16) (a) nəḍi:  
'river'

(b) nəḍi-a  
'river-PRT'

(17) (a) cini:  
'sugar'

(b) cini-a  
'sugar-PRT'



The base form of nouns ending with the sound [ɔ] takes the particle *-ia*. For example:

- (18) (a) kəɔ  
           ‘mud’
- (b) kəɔ-ia  
           ‘mud-PRT’

However, these base forms can also occur with the particle *-wa*. For example:

- (19) (a) kəɔ  
           ‘mud’
- (b) kəɔ-wa  
           ‘mud-PRT’

However, there are huge numbers of nouns that show variation in taking particles. Some nouns occur with certain particles. For example, *g<sup>h</sup>ər* ‘house’ in (20a) and *ləika* ‘boy’ in (20b) occur with the particle *-wa*. This sort of noun never occurs with other particles as shown in (21). There are other nouns that have option to take different particles as shown by (22) and (23). The noun *ɖãɥ* ‘teeth’ or *gilas* ‘glass’ can take either *-wa* or *-ia* as in (22a) and (22b) respectively, or *alu* ‘potato’ or *saɖ<sup>h</sup>u* ‘saint (mostly *u/u* ending except proper names) can take *-wa*, *-a* or *-ia* as in (23a) and (23b) respectively.

It is to be noted that there is considerable variation in exactly which form of the particle is chosen for which noun. Some nouns occur with certain particles. Nouns like *g<sup>h</sup>ər* ‘house’ in (20a) and *ləika* ‘boy’ in (20b) may occur only with the *-wa* form, but as (22) and (23) show, other nouns may optionally be realised with more than one form.

- (20) (a) *g<sup>h</sup>ər* ‘house’ - *g<sup>h</sup>ər-wa* not \**g<sup>h</sup>ər-ia* or \**g<sup>h</sup>ər-ma* or \**g<sup>h</sup>ər-a*
- (b) *ləika* ‘boy’ - *ləik-wa* ‘Others forms are not possible’



In addition, the numeral *ego* ‘one’ does not give normal narrow scope interpretations. For example, (25) cannot be used to give an answer to the question ‘*Is there a mouse in the room?*’ (see Dayal 2004 for Hindi).

(25) # nə ɡ<sup>h</sup>ərwa me ego cʊha nə həi:  
no room in one-go mouse not is

‘No, there’s one mouse which is not in the room’ or

‘No, not even one mouse is there in the room.’

Löbner’s (1985) diagnostic of consistency takes apart true definites from demonstratives. According to the diagnostic, a noun phrase with *the* in English yields only a contradictory reading when a predicate and its negation are applied to it as in (26a) whereas demonstrative brings a reasonable interpretation as in (26b).

(26) (a) #The boy is sleeping and the boy is not sleeping.

(b) That boy is sleeping and that boy is not.

*English*

(27) # ləik-wa sʊti:t həi au ləik-wa nə sʊti:t həi. *Magahi*  
boy-PRT sleeping is and boy-PRT not sleeping is

The Magahi translation of (26a) in (27) shows that the inflected form of Magahi nouns can be associated with the definite form. However, there are many situations where English definite article can be used but Magahi *-wa* cannot be, as shown in (28). The English sentence (28a) can be uttered only in a context where a person is showing a lion to a child and there is no presupposition of familiarity with a contextually salient lion. The sentence would not be felicitous if the child had just seen a lion in another place. For the same situation, in Magahi, a bare nominal is used as shown in (28b). The use of *-wa* makes the sentence infelicitous in this situation, as to use *-wa* there must be a presupposition of familiarity with a contextually salient lion. The sentence (29) would not be felicitous if the person did not talk about a lion before he had shown one lion to the child.

(28) (a) This is the lion. *English*

(b) i: ser/\*ser-wa həi  
this lion/ lion-PRT is

(29) i: ser-wa həi  
his lion-PRT is *Magahi*

To support this claim, let us consider (30).

(30) (a) The lion comes in several varieties, the African lion, the Asian lion etc. The African lions are the most dangerous.

*English*

(b) ser kə ʔərəh ke hobə he. əp<sup>h</sup>rikən ser esiən ser....  
lion several like GEN be is Afican lion Asian lion

**əp<sup>h</sup>rikən** **ser-wa** səbse jaɖe k<sup>h</sup>ə ʔərnək hobə həi:  
African lion-PRT most dangerous be is

‘The lion comes in several varieties, the African lion, the Asian lion etc. The African lions are the most dangerous.’

*Magahi*

Example (30a) shows that the English definite article *the* can be used in a discourse where there is no presupposition of familiarity with a contextually salient lion. In other words, the definite noun phrase *the lion* is used because the referent is uniquely identifiable to the hearer. The Magahi translation (30b) of (30a) shows that the uniqueness effect comes through the use of bare nominals in Magahi. In (30c), the use of the inflected form (*əp<sup>h</sup>rikən serwa* ‘the African lion’) necessarily requires a presupposition of familiarity.

Let us then call *-wa* as presuppositional familiar marker in Magahi. Due to the presuppositional familiar interpretation of the inflected form of the Magahi nouns, this form is used in the situations described by Hawkins (1991) in his study of the source of definiteness, based on identifiability or familiarity. The contexts of usage of this particle are given below.

(A) The situation in which an entity is a member of the previous discourse set, that is, the situation where it has already been talked about as in (31) and (32). Example (31) shows that the inflected form *kuṭwa* is used because *kuṭṭa* ‘dog’ is already introduced in the discourse. For the same reason, in (32) *gəidwa* was used because *guide* is already introduced in the discourse and the boy assumes that the shopkeeper knows about the guide he is talking about.

(31) kəl həm bəgəi:c-wa me e-go kuṭṭa ɖək<sup>h</sup>liəi:  
yesterday I garden-PRT in one-go dog saw

kuṭwa cəha k<sup>h</sup>aɪṭ hələi:  
dog-PRT rat eating was

‘Yesterday, I saw one dog in the garden. The dog was eating rats.’

(32) Boy: bɲk kələrk ke ɬəiari: la e-go gaid ɖə.  
bank clerk of preparation for one-go guide give

‘Give me a guide for the preparation of bank clerk.’

Shopkeeper: ɑɟ ɬə nə həo. kəlɬ awə.  
today PRT not is. Tomorrow come

‘It is short today. Please come tomorrow.’

Next day

Boy: gəid-wa lələ?  
guide-PRT bring-PST

‘Did you bring the guide?’

(B) If an entity is a part of the immediate situation of utterance in which the speaker and the addressee find themselves included, as (33) shows. The inflected form *k<sup>h</sup>iṭkia* ‘window’ is unambiguously used because there is a window in the speaker and hearer’s field of vision.

- (33) k<sup>h</sup>iŋki-a      bõnd      kər      ɖe.  
 window-PRT close      do      give  
 ‘Please close the window.’

(c) Knowledge shared by people in the same physical location such as the same village, the same city or the same country is identifiable or familiar, as shown by (34), which can be uttered to any person who lives in the same town. Here, the meaning of the word *əspətəliə* ‘hospital’ is the unique hospital of their town, thus it is familiar.

- (34) əspətəl-ia      me      koi:      sub<sup>h</sup>ɖ<sup>h</sup>a      nə      həi  
 hospital-PRT      in      any      facilities      not      are  
 ‘There are no facilities in the hospital’

(D) If an entity has a predictable co-occurrence based on community knowledge, it can be identifiable or familiar. In the example (35), the speaker uses the inflected form *əurt̪iən* ‘the women’ on the basis of community knowledge because all the members of community know that the *səb<sup>h</sup>a* ‘meeting’ includes the gathering of men and women.

- (35) ɑ̃<sup>h</sup>      e-go      səb<sup>h</sup>a      həlo.      əurt̪-i-ən      bət̪i:      həlla      kəriŋ      hələi:  
 today      one-go      meeting      was.      woman-PRT-PL      lot      noise      doing      were  
 ‘Today, there was a meeting. The women were making lots of noise.’

(E) Finally, a referent may be considered identifiable/familiar when the relevant information is provided within the definite NP itself, such as a genitive phrase as in (36a) or a relative clause as in (36b).

- (36) (a) həməɾ      ɡ<sup>h</sup>ər-wa      ke      ɕ<sup>h</sup>ət̪-wa.  
           my      house-PRT      gen      roof-PRT  
           ‘The roof of my house’
- (b) ləik-wa      ʒəkəɾa      bare      me      həmni:      əb<sup>h</sup>i:      bət̪iɑiŋ      hələi:  
           boy-PRT      RelPro      about      in      we      now      talking      were  
           ‘The boy, we were just talking about.’

The use of *-wa* with the name of a familiar person supports the claim that *-wa* is a familiarity marker, whose use also often marks intimacy. Let us consider the example (37).

- (37) Dhiraj: *bəŋʃi-a cəl krikeʃ kʰele.*  
 Banti-PRT move cricket play  
 ‘Banti lets go to play cricket.’

Banti: *əkele*

alone

- Dhiraj: *di:pʊ-a aʊ sənti-a ke kəh.*  
 Deepu-PRT and santi-PRT PP tell  
 ‘Ask Deepu and Santi.’

The example (37) represents a conversation between friends. Dhiraj uses the particle *-a* with his person names *bəŋʃi*, *di:pʊ* and *sənti* because they are his friends. Such formulations are never used with strangers.

### 2.2.1.2 Particle *-wa* is not a Topic Marker

In this section, I compare *-wa* with the Magahi topic marker and show that *-wa* is not a topic marker. The topic function in Magahi is performed by the clausal particle *ʃə*.

Kidwai (2000) analyses the Hindi particle *ʃə* as a topic marker. It can be attached to any maximal projection of a lexical category, i.e. DPs (38a), VPs (39a) or PPs (40a), which has been introduced prior to the utterance or when the speaker assumes that the referred knowledge is shared by the hearer. Further, she assumes that this particle cannot be attached inside the phrase as in (38b), (39b), & (40b) (see Kidwai 2000: 42).

- (38) (a) [*meri: kali: kiʃab*] *ʃə mil gəi:*  
 my black book TOP found went  
 ‘My black book was found.’

- (b) \*[*meri [kali: ʃə kiʃab]*] *mil gəi:*

(39) (a) ram [kiṭab pəɾ ] ʔo rəha he.  
 Ram book read TOP PROG is  
 ‘Ram is reading a book’

(b) \*ram [kiṭab pəɾ [rəha ʔo ]] he

(40) (a) siṭa [nur ke pas ] ʔo gəi:  
 Sita Noor GEN near TOP went

(b) \*siṭa [[nur ʔo ke ] pas ] gəi:

Magahi also uses the particle *ʔo* for the topic function, which like Hindi can be used with a lexical category that has been introduced prior to the utterance or when the speaker assumes that the referred knowledge is shared by the hearer. However, Magahi shows a distributional pattern of the particles which is different from *ʔo* in Hindi. It can be attached to any maximal projection of a lexical category i.e. DPs (41a), VPs (41b) or PPs (41c) or inside the lexical category as in (42a), (42b), & (42c).

(41) (a) [həmər kərika kiṭab-wa ] ʔo mil geləi:  
 my black book-PRT TOP find went  
 ‘My black book was found.’

(b) mohən [kiṭab-wa pəɾ<sup>h</sup> ] ʔo leləkəi: he.  
 Mohan book-PRT read TOP took be  
 ‘Mohan has read the book.’

(c) kiṭab-wa [ tebəlbe pər ] ʔo həi:  
 book-PRT table on TOP be  
 ‘The book is on the table.’



- (42) (a) [həmər ʔo kərika kiʔəb-wa] mil geləi:  
 my TOP black book-PRT find went
- (b) [həmər kərika ʔo kiʔəb-wa] mil geləi:  
 my black TOP book-PRT find went
- (c) [həmər kərika kiʔəb-wa ʔo] mil geləi:  
 my black book-PRT TOP find went

Comparing the distribution of the topic marker *ʔo* with that of the particle *-wa* of Magahi would show some facts:

- i. *ʔo* is attached at the maximal projection of any lexical category i.e. DPs, VPs or PPs whereas *-wa* is used only with noun phrase,
- ii. *ʔo* functions at clausal level while *-wa* functions at phrasal level (only in NPs),
- iii. *ʔo* and *-wa* can be used together either within a clause or within a phrase.
- iv. *ʔo* has the function of topic whereas *-wa* is used as a presuppositional familiar marker.

This comparison suggests that *ʔo* and *-wa* have a distinct function and distribution in Magahi. In Magahi, the topic function is performed by the clausal particle *ʔo* and not by the nominal particle *-wa*.

Let us then conclude that the English definite article and Magahi *-wa* have different functions, distributions and categorial statures. The English article has a lexical status, while Magahi *-wa* is always attached to the Magahi nouns to get the inflected form. English *the* is used in both uniqueness and familiarity situation but, no subtle uniqueness effect can be associated with Magahi -

*wa* -rather- it is used as a presuppositional familiar marker. The bare plurals in Magahi are possible in situation where uniqueness is satisfied. Or, alternatively, the definiteness effect is achieved through bare nominals in Magahi.

In the recent studies, it has been well established that the grammaticalization of definiteness implicates D (Alexiadou et al (2007)). Lyons (1999) argues that it is D itself that carries the semantic/pragmatic definiteness, and syntactically encodes the grammatical feature [ $\pm$ DEF]. In fact, Lyons assumes DP as a definiteness phrase. In Lyons words:

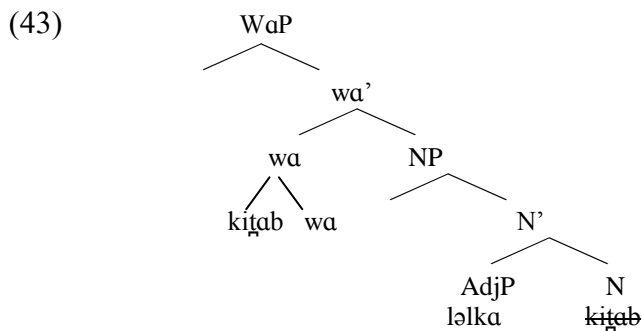
It is reasonable to suggest that only definite determiners are associated with D and its projection DP. D is definiteness and DP is definiteness phrase. So the grammatical category which I have claimed definiteness is has its representation in syntax in the form of this functional head.

(Lyons 1999)

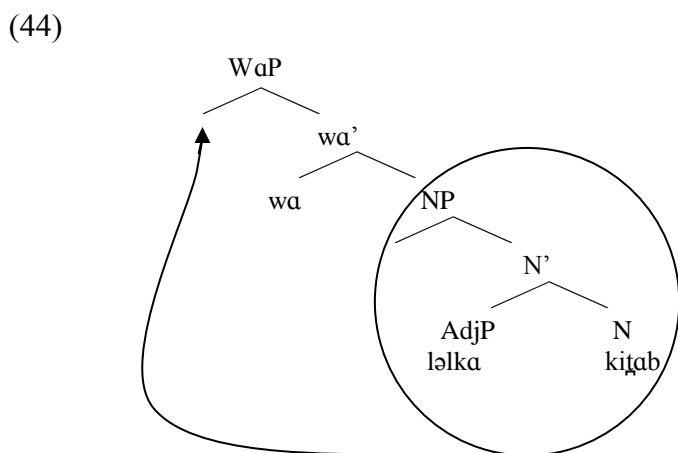
Following Lyons' (1999) work which points out that definiteness is universal, while its grammaticalization is language specific, Dayal's (2004, 2009) hypothesis and facts from Magahi, I propose that the categories that realise definite noun phrases universally are conditioned by a parametric choice in universal grammar. In article languages such as English it is realized through DP while in article-less languages such as Magahi (as we saw above), Hindi or Russian (see Dayal 2004, 2009 for details), it is achieved through covert type shift operation NOM. In other words, the bare Magahi noun phrases can be analyzed as NP with covert type shift. Thus, there is no syntactic or semantic motivation for D in Magahi, and therefore, there is no DP analysis of Magahi noun phrase.

### 2.2.1.3 Syntax of *-wa*

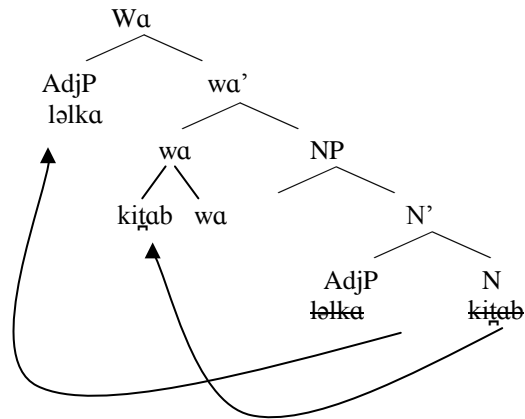
This section discusses the problems of using *-wa* as a head. Let us begin with the structure (43). A simple noun phrase with adjective *lalka kiṭābwa* 'the red book' has the following phrase structure tree if *-wa* is assumed as a head:



To pick up the morphology *-wa*, noun *kiṭab* has to move and adjoin to it, but it generates the sequence *kiṭabwa ləlka* which does not maintain the linear ordering. In order to maintain the linear ordering, there are two possibilities. One is to move the whole NP to spec of *-waP* as in (44), which is improper movement because of anti-locality, which requires movement to cross at least one full phrasal boundary and not just a segment (see Bošković 2005b, 2010b, also see chapter 3, section 3.6 of this dissertation). The other possibility is that the noun has to move to *-wa* and the AdjP has to move to spec of *-waP* as in (45), but there is no motivation for such kind of movement. It seems that the only motivation for raising AdjP to [Spec, waP] is only for getting linear order.



(45)



In the minimalist approach, since the base form and the inflected form are in the lexicon, they are both available for selection in the numeration. As the *-wa* inflection is added to the noun to encode presuppositional familiarity, it is reasonable to assume that the feature it represents is not uninterpretable. In other words, the base form of noun *ləika* differs from the inflected noun form *ləikwa* in that the former denotes one entity with the relevant properties to qualify as a *boy* and the latter denotes that the entity is familiar. Thus, the choice of the *-wa* inflected form involves the choice of an LI with a [+interpretable] feature.

Note also that in Magahi, this [+interpretable] feature is accessed by phi-feature agreement operations. Just as adjectives agree with the gender (46a & 46b) and number (46c) with the noun, they also agree with the familiarity (46d). The inflected nominal forms always take inflected adjectives as shown in (46d).

(46) (a) kəri-ka      ləikwa  
           balck-SUF-M    boy  
           ‘the black boy’

(b) kəri-k-i:      ləikia  
           balck-SUF-F    girl

‘the black girls’

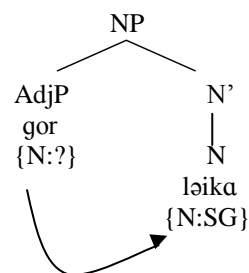
- (c) kəri-k-ən      ləik-w-ən  
 black-SUF-PL   boy-PRT-PL  
 ‘the black boys’

- (d) ləl-kɑ/\*lɑl      kiṭəb-wɑ  
 red-SUF      book-PRT  
 ‘the red book’

In recent literature, agreement is ensured by the relation *Agree* without movement. When any two syntactic units are combined by the operation *Merge*, *Agree* relation (Chomsky 2000, 2001) must be established between these elements. *Agree* relation is an asymmetric relation between a Probe and a Goal. The Probe has uninterpretable features ( $u\phi$ ) while the Goal has matching interpretable features ( $I\phi$ ). The active probe searches an active goal in its c-command domain. The operation *Agree* eliminates the uninterpretable features on the probe by *valuing* and *deleting* them.

When adjective is merged with the noun, an agree relation is established between these two. The  $u\phi$  such as number as in (47a) and (48a), of the adjective probe for the features of noun and *Agree* values and deletes the features on the adjective shown as in (47a) and (47b)<sup>2</sup>.

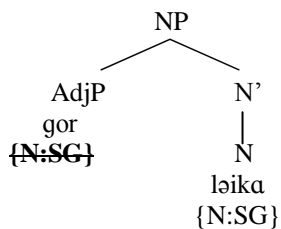
(47) (a)



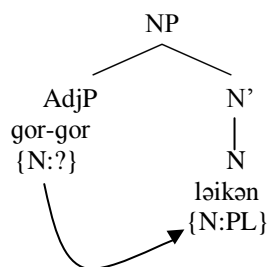
<sup>2</sup> For purpose of readability, i have used the following conventions and abbreviations

- ? :      for unvalude feature
- **Bold**    for valude and deleted feature after agree relation
- F:      for familiarity feature
- f:      for valued familir feature

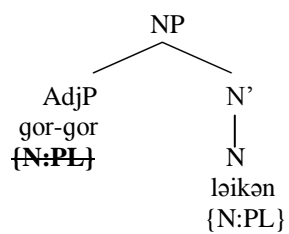
(b)



(48) (a)

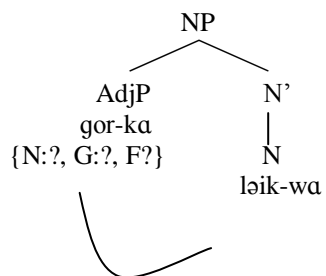


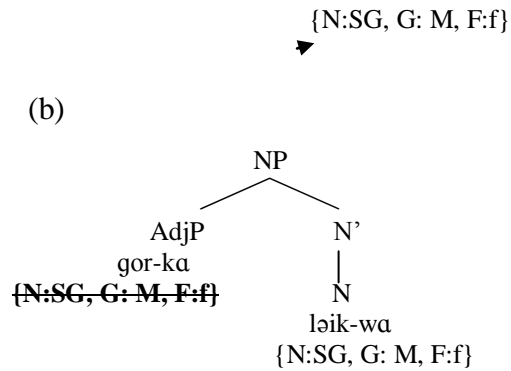
(b)



Similar phenomenon happens when inflected nominal and adjective are merged. Like other  $u\phi$ , the uninterpretable familiarity feature on adjectives are also valued and deleted by Agree with the noun as in (49b).

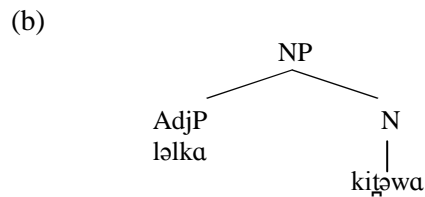
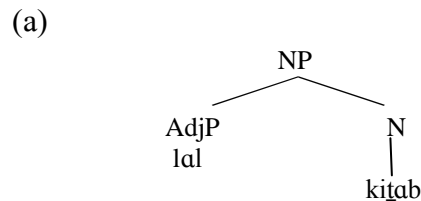
(49) (a)





Suppose, however, that we were to assume that *-wa* was a head in the noun phrase, with a  $\text{u}\phi$  set. It would then be impossible for the adjective to Probe for an  $\text{i}\phi$  set to Agree with, as *-wa* would not possess any such set. Thus, there is no motivation to postulate *-wa* as a head, and all the evidence points to it to be an inflectional particle that is merged onto the noun. I therefore propose that the Magahi *-wa* is an affective particle that does not project when it is merged with the noun. In other words, as (50) shows, whether the noun has *-wa* merged to it or not, the maximal category is always NP.

(50)



### 2.3 Bošković's Generalizations and Magahi noun phrase

If our analysis that Magahi noun phrases do not project DP is right, then we should expect that Bošković's (2005a, 2005b, 2008, 2010a, 2010b) generalizations are applicable to Magahi. Bošković

argues that there is a fundamental structural difference in the traditional noun phrase (TNP) of English and article-less languages like Serbo-Croatian. For example, left branch extraction is disallowed in the former but allowed in the latter. His generalizations such as adjunct extraction from NP, scrambling, superiority and multiple Wh-fronting, focus morphology, classifier, number morphology and many others are applicable to article-less languages, but they are not allowed in languages with articles like English. According to him, the presence or absence of article in a language plays a crucial role which cannot be reduced to phonology since the cross-linguistic generalizations involve syntactic-semantic phenomena. In particular, languages that do not have articles do not project DP.

In the following sub-sections, I apply these generalizations on Magahi data to determine the extent to which Magahi conforms to these generalizations.

### 2.3.1 *Left Branch Extraction*

Only languages without articles may allow left branch extraction. Let us take the following examples (51) & (52) from Magahi. Example (51) shows the basic word order of adjective and noun within a noun phrase whereas (52) shows that the adjective *c<sup>h</sup>ote-go* ‘small’ can be extracted out of an NP.

(51) həm [c<sup>h</sup>ote-go am] k<sup>h</sup>əili:  
 I small-go mango ate

(52) c<sup>h</sup>ote-go<sub>i</sub> həm [t<sub>i</sub> am] k<sup>h</sup>əili:  
 small-go I mango ate  
 ‘I ate a small mango.’

### 2.3.2 *Adjunct extraction from NP*

Only languages without articles may allow adjunct extraction out of TNPs as shown in (53). Magahi allows extraction of adjunct *kəun bisəy pər* ‘on which subject’ out of the NP *kəun bisəy pər kiṭab* ‘book on which subject’.

(53) [kəun bisəy pər]<sub>i</sub> həm [t<sub>i</sub> kiṭab] pər<sup>h</sup>li: .



which subject on I book read

### 2.3.3 Scrambling

Bošković (2008) establishes the generalization that “only languages without articles may allow scrambling”. The example (54a) shows the basic word order of subject and object whereas the example (54b) shows the scrambling of object *həmra* ‘me’ over the subject *u* ‘he’.

(54) (a) *u həmra ɖekʰkəi:*  
 He me saw  
 ‘He saw me.’

(b) *həmra u ɖekʰkəi:*  
 me he saw  
 ‘He saw me.’

### 2.3.4 Superiority and multiple Wh-fronting

Bošković (2008) establishes the correlation of superiority effects with multiple wh-fronting (MWF) and concludes that “MWF languages without articles do not show superiority effects”. Magahi too does not show superiority effects with MWF. There is no superiority between the wh-word *ke* ‘who’ and *kekəra* ‘whom’ since both can be replaced with each other as shown in (55).

(55) (a) *ke kekəra ɖekʰkəi:?*  
 who whom saw  
 ‘Who saw whom?’

(b) *kekəra ke ɖekʰkəi:?*  
 whom who saw  
 ‘Who saw whom?’

### 2.3.5 Number morphology

Number morphology may not be obligatory in NP languages (Bošković 2010b). This is true for Magahi. In example (56), the Magahi noun *kiṭab* ‘book’ can be interpreted as a plural noun without the use of any plural morphology.

- (56) ram kiṭab k<sup>h</sup>əri:ḍe geləi:  
 Ram book to buy went  
 ‘Ram went to buy a book/ books.’

### 2.3.6 *Classifiers*

Bošković (2010b) notes “obligatory nominal classifier systems are available only in NP languages.” Magahi does not have noun classifier system, but it does have numeral classifier system which is obligatory. This can be seen in the example (57) which is ungrammatical when numeral *ek* ‘one’ is used without classifier.

- (57) həm e-go/ \*ek am k<sup>h</sup>əli:  
 I one-go/ one mango ate  
 ‘I ate a mango.’

Since Magahi data confirms Bošković’s generalizations, it supports the claim that Magahi does not project D.

## 2.4 Conclusion

The chapter has argued against the uniform analysis of noun phrases in the term of DP hypothesis. Section 2.1 focused on the grammatical representation of (in)definiteness and its implications for the structure of nominal expressions. The discussion derives the conclusion that languages have different strategies to encode definiteness in addition to articles. We have seen that definiteness in an article-less language, Hindi comes from the bare noun, and that no semantic motivation for D is present (Dayal 2004, 2009). Section 2.2 has dealt with the mechanism of definiteness marking in Magahi, and argues that uniformity of syntactic structure is not required for noun phrase arguments across or within languages. I have shown that Magahi does not have (in)definite articles and that definiteness is not expressed by the functional category D. In the remaining part of the section, I have argued that the Magahi particle *-wa* is not a definiteness marker, but rather an affective particle that does not project. Finally in section 2.3, I have applied Bošković’s (2005a, 2005b, 2008, 2010a & 2010b) generalizations to support the claim that there is no DP-analysis of Magahi noun phrase.

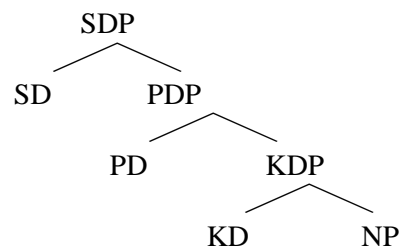
## Chapter 3

### The Syntax-Semantics of Magahi noun phrases

Research inspired by Abney (1987) (e.g., Cinque 1992, Longobardi 1994a) has suggested that the structure of noun phrases is more complex than the original Abney proposal postulated. These works claim that there is a similarity between the structure of the noun phrase and that of the clause, in that there is raising between the NP and DP in a way very similar to V- movement to I. Later research in this area (Szabolcsi 1994, Bhattacharya 1995, 1998, 1999, Giusti 1991, 1996, 2005, 2006, Löbel 1989 and many others) focuses on the region between the DP and the NP and proposes a three layered DP structure: DP-XP-NP, assuming that the noun phrases have a much greater similarity to the clauses than it was believed.

Bhattacharya (1999) noticed that the D performs two functions at the same time in the Abney system: fixing up the reference of the phrase and quantifying over the event variable of the NP. He suggests that these two functions must be separated. The quantificational/ predicative function of Abney's D is performed by X. D is referential in nature and X, in this case quantifier (Q), is predicative in nature. Before Bhattacharya, Zamparelli (1996) actually takes this XP as a "Predicative Phrase". The basic structure that he proposes for the noun phrases is the three layered structure as in (1), which he refers to as the *Multi-Layer DP Hypothesis*. In (1), SDP stands for *Strong Determiner Phrase* representing a referential part of the noun phrase, PDP for *Predicative Determiner Phrase* representing predicative function and KDP stands for *Kind Determiner Phrase*.

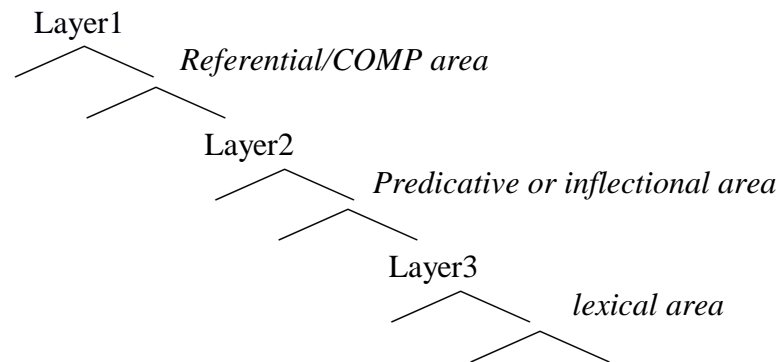
(1)



In this system, both SDP and PDP host the determiner elements of a language. More than one determiner can appear either within PDP or SDP, but these projections can also be empty. According to Zamparelli, the meaning of a noun phrase as a whole comes from three factors: “Whether the topmost projection is present or missing; whether the topmost projection, when present, is occupied by a lexical material, or headed by an empty element; whether a lexically filled topmost projection is interpreted in situ, or undergoes the operation of quantifier raising and quantifier construal” (Zamparelli 1996).

Giusti (2005) also argues that, as with the clause, the noun phrase structure also has three layers, as in (2). The highest layer is a referential area or a COMP like area, the middle layer is an inflectional area and predicative in nature, and the lowest layer is headed by the lexical item N itself.

(2)



Giusti argues that parallel to a sentence, noun phrase structure has a left peripheral position to host A-bar movements. She adopts the split DP hypothesis as in (3), parallel to Rizzi’s (1997) split CP, to capture the occurrence of more than one functional element related to the D, and to account for the marked word orders within the Romanian noun phrases. TopicP and FocusP are located between the the highest functional projection, DP and the lowest projection, small dP.

(3) DP > TopP\* > FocP > TopP\* > dP (Giusti 2005)

If Topic and Focus are not merged, DP and dP are realized as a single projection. She proposes the following properties of the split-DP as in (4):

- (4) (a) TopP and FocP are merged only if necessary.
- (b) If no TopP or FocP is merged, ForceP and FinP can be realized in a unique projection.
- (c) If the ForceP and FinP are split, it is not often the case that both heads are realized by an overt element, in some cases one is zero and the other is overt.

My own proposals in this chapter are made in the spirit of the layering hypothesis, but without the assumption of a DP. Rather, I shall argue that there exist Topic and Focus projections within the nominal projection. But before I do so, I shall examine the other categories of the Magahi noun phrase. The chapter is organized in five sections. Section 3.1 reviews the Bhattacharya's (1999) works on Bangla noun phrase. Section 3.2 deals with the syntax and semantics of the different components of Magahi noun phrases. The first sub-section deals with the quantifiers (Q), numerals (Num) and classifiers (Cla). This section claims that Num and Cla are two separate functional heads in Magahi, and that the Q projects its own functional projection, QP, and is located at the specifier of that projection. The next sub-section deals with adjectives (Adjs), demonstratives (Dems) and possessives (Poss). This section shows that Dem and Poss are modifiers in Magahi, which project their own functional projections and are generated at the specifier of those projections. Section 3.3 deals with the phase analysis of the Magahi noun phrases, and shows that NP is phase in Magahi. Section 3.4 discusses inflectional markers, found in Magahi noun phrases and their semantics and pragmatics. Finally, section 3.5 argues that there is a pre-Poss COMP like position in Magahi noun phrases.

### **3.1 Bhattacharya (1999): Bangla noun phrases and three layered DP**

Bhattacharya (1999) argues that the XP layer intermediates between DP and NP and is occupied by QP in Bangla noun phrases. He claims that quantifier/numeral (Q/Num) and classifier (Cla) are a part of the QP domain, proposing that Q and Cla are a fused head [Q/Num-Cla], as both quantify their following nominal argument. Q and Cla can never be separated in Bangla. The examples in (5) (from Bhattacharya 1999) show that a Q/Num-Cla sequence is followed either by N (5a), zero N (5b), Adj (5c), or Adj-N (5d) and quantify them.

(5) (a) kichu-Ta doi  
 some-cla curd

(b) kichu-Ta dekhechi.  
 some-cla seen-1  
 ‘(I) have seen some.’

(c) dilli-r cee kichu-Ta bORo  
 delhi-Gen than somewhat-cla big  
 ‘Somewhat bigger than Delhi’

(d) tomar ei kOek-Ta notun SaRi  
 your this some-cla new sari

In Bhattacharya (1999), Dem is not considered as a head, on the basis of his discussion around examples like (6) and (7) (from Bhattacharya 1999):

(6) (a) ei du-To boii  
 this two-cla book  
 ‘these two books’

(b) \* boii ei du-To ti

(c) ei boii du-To ti

(7) (a) ei du-To lal boi  
 this two-cla red book  
 ‘these two red books’

(b) \* [lal boi]<sub>i</sub> ei du-To t<sub>i</sub>

(c) ei [lal boi]<sub>i</sub> du-To t<sub>i</sub>

These examples show that the leftward movement of NPs *boi* ‘book’ in (6b) and *lal boi* ‘red book’ in (7b), which crosses demonstrative *ei* ‘this’, is not allowed in Bangla. If Dem was a head, it should

not be the barrier to XP movement. Thus, Dems behave like an XP rather than a head. Since there is no other functional projection between the D and Q in Bangla (unlike Swedish and Norwegian where FP is proposed by Bernstein 1997), the only way to generate the Dem in this language is as a QP adjunct.

Bhattacharya (1999) takes possessives to be adjectives and argues that they are generated within the NP. In the case of kinship-inversion, the possessive remains in its base-generated position, as in (8a); otherwise, it has to move up to [Spec, QP] to check the [specificity] feature of the Q head. However, it cannot stay there due to another similar interpretable feature of D at [Spec, DP]. This [strong] D feature triggers another movement of possessive to [Spec, DP] and thus we get the order Poss-Dem-NP as in (8b).

- (8) (a) baba        amar    khub    gorib  
          father    mine    very    poor
- (b) ama-r<sub>i</sub>     ei        du-To    t<sub>i</sub>     boi  
          my-gen    this    two-cla    book

## 3.2 The Magahi noun phrase

### 3.2.1 Quantifiers, Numerals and classifiers in Magahi

#### 3.2.1.1 Distribution of Quantifiers and Numerals in Magahi

Unlike in Bangla, examples (9a) & (9b) suggest that quantifiers (Q) and numerals (Num) can co-occur in Magahi. The use of numeral *ʃi:n* ‘three’ and quantifier *səb* ‘all’ in (9a) and *kəʊno* in (9b) within a noun phrase makes a perfectly grammatical expression in Magahi. Example (9) shows that the Q and Num occupy different syntactic slots in Magahi.

- (9) (a) ʃor    səb    ʃi:n-o    kiʃəb-w-ən  
          your    all    three-o    book-PRT-PL
- (b) kəʊno    ʃi:n    go    kiʃəb  
          any    three    go    book

### 3.2.1.2 Numeral Classifiers

The bare NP in Magahi can be used in kind (10) and generic contexts (11). However, it can not be combined with numeral without an intervening element as shown in (12)-(13):

(10)    dajnasor    biluṭṭ    ho    geləi:  
          Dinosaur    extinct    be    went  
          ‘Dinosaur is extinct.’

(11)    ciṛəi:    uṛə    həi:  
          bird    fly    is  
          ‘Birds fly.’

(12)    pāc    go    kiṭab  
          five    go    book  
          ‘five books’

(13)    \*pāc    kiṭab  
          five    book

The nominal cannot thus function as a complement to a numeral in Magahi, and numerals must instead be first combined with the separate syntactic element *go/t<sup>h</sup>o* (the two elements are in free variation). Since examples (14)-(15) show, the use of *go* does not require number morphology, so it could be called a numeral classifier.

(14)    car-o    kiṭab-w-ən  
          four-o    book-PRT-PL  
          ‘all the four books’

(15)    car-o go    kiṭab  
          four-o cla    book  
          ‘at least four books’

This kind of classifier is called *mensural classifier*; a type of numeral classifier which contain information about how the referent is measured, rather than to characterize the noun in terms of animacy or other inherent properties (Aikhenvald 2000, 2006). There are three mensural classifiers *go*, *məni:* and *sun* in Magahi. *go* is used to measure referent in terms of length or number while



*məni:* and *sun* are used to measure referent in amount as shown in (16). Example (16a) is used for a huge gathering of men, whereas (16b) is used for a very few men. In contrast, example (16c) is used for a man of short height, while (16d) is used for the number of men.

- (16) (a) bəʃi məni: aɖəmi:  
           lot  cla  man  
           ‘lots of men’
- (b) ʃəni: sun aɖəmi:  
           little cla man  
           ‘a few men’
- (c) ʃəni: go aɖəmi:  
           little cla man  
           ‘small man’
- (d) caʀ go aɖəmi:  
           four cla man  
           ‘four men’

These facts are comparable to those of Chinese – Chao (1968), T'sou (1976), Sun (1988), Wang (1994), Tai (1994), Krifka (1995), Yang (1998), Cheng & Sybesma (1998, 1999, 2005), Aikhenvald (2000), Zhang (2007) and others. In Chinese, the bare NP denotes kind and does not show a number distinction; therefore, an intervening element is required such as a measure phrase (17a), an object level classifier (17b) or a species level classifier as in (17c) for numerals to combine with nouns (from Krifka 1995):

- (17) (a) sān qún xióng  
           three herds bears  
           ‘Three herds of bears’
- (b) sān zhī xióng  
           three CL bear  
           ‘Three bears (objects)’
- (c) sān zhǒng xióng  
           three CL bear  
           ‘Three bears (species)’

The lack of obligatory plural marking on noun is a typical property tied with the existence of numeral classifiers in several languages (Greenberg 1972, Chierchia 1998). According to Chierchia (1998), nouns in these languages already contain pluralities. Therefore, they are *lexically plural* and cannot be further pluralized.

Magahi has an interesting number marking system in this respect. In most cases, Magahi nouns are not marked for plurality, such as in *kiṭab* ‘book/books’, *ciṛəi*: ‘birds/birds’. However, some nouns are marked with a plural morpheme *-ən*, such as *ləika* ‘boy’ > *ləik-ən* ‘boys’. These plural forms of nouns can be used with the classifiers as in (18a). However, the plural morpheme is not obligatory, as shown in (18b)<sup>1</sup>:

- (18) (a) *pāc go/t<sup>h</sup>o ləi:k-ən*  
           five cla boy-PL  
           ‘five boys’
- (b) *pāc go/t<sup>h</sup>o ləi:ka*  
           five cla boy  
           ‘five boys’

Krifka (1995) identifies the role of the classifiers as a mediator between the kind term and the units of measure required for counting. On the basis of crosslinguistic nature of the classifiers, I assume *go*, *məni*: and *sun* to be the numeral classifiers in Magahi. Furthermore, on the basis of crosslinguistic analyses regarding quantifiers, numerals, and classifiers (see Giusti 1991 for Romanian, Löbel 1989 for German, Bhattacharya 1999 and Ghosh 2002 for Bangla, Tang 1990 for Chinese), it seems that Q, Num and Cla in Magahi are functional heads.

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<sup>1</sup> Based on this argument, it could be hypothesised that Magahi is going through the process of language change where it is losing its number morphology in favour of a classifier system (Doetjes 1997). Doetjes (1997) mentions that the loss of number marking ultimately leads to the development of a classifier system in languages. However, there are languages such as South Dravidian languages, Algonquian languages as well as some South American languages where despite the presence of numeral classifiers, number marking is obligatory (Aikhenvald 2006).

### 3.2.1.3 Syntax of *Quantifiers, Numerals and Classifiers*

The syntactic status of Q, Num and Cla in Magahi seems to be different than in Bangla (see Bhattacharya 1999 for Q/Num-Cla as a fused head). As I have already mentioned, Q and Num occupy different syntactic slots in Magahi so, Q, Num and Cla do not seem to be a fused head. Consider some additional data in (19):

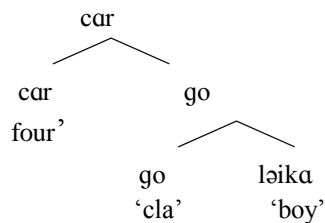
- (19) (a) *cār* \*(*go*) *ləika*  
           four cla boy  
           ‘four boys’
- (b) *cār-o* *ləik-w-ən*  
           four-o boy-PRT-PL  
           ‘all the four boys’
- (c) *cār-o go* *ləik-ən*  
           four-o cla boy-PL  
           ‘at least four boys’

Example (19) shows that the classifier *go* is obligatory with bare numerals, but optional with inflected numerals (19b-c). The (un)availability\* of classifier *go* changes the semantics of nominal phrase. In the above examples, (19b) presupposes that the speakers need exactly four boys familiar to both the speaker and the hearer. If there are more than four boys salient in the discourse then the sentence will become infelicitous. (19c) is used in the context where the set of four boys is to be drawn from the prior existence of a set of boys (partitive specificity (Dayal forthcoming)). Or alternatively, (19b) has a definite reading, and (19c) has a specific indefinite reading.

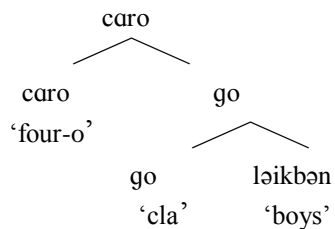
I claim that unlike Bangla Num and Cla are two different syntactic elements in Magahi, and cannot be considered as a fused head, and are listed as two different items in the lexicon. To explain the distribution and semantics of Num and Cla, I argue that Num and Cla are two separate functional heads in the Magahi nominal phrase and occupy the inflectional area in the assumed noun phrase structure (2). We, then, have a structure like (20a-b). In my analysis, the Cla moves and attaches to Num since in the presence of the classifier the sequence Num-Cla is never broken down. The case where there is no overt classifier as in (19b), I assume that the Cla is not in numeration, thus not available for derivation as shown in (21). The meaning of a noun phrase comes from the fact that

Cla is available in numeration or not. By this, different semantics that exist in the presence/absence of the Cla can be explained.

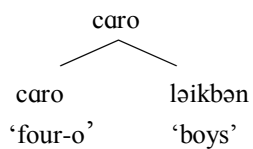
(20) (a)



(b)



(21)



Finally, let us examine the syntactic status of Q in Magahi. The classifiers *go*, *məni:* and *sun* do not occur with true quantifiers such as *every*, *each*, *all*, *some*, *any*, *whole* etc. In other words, these Qs do not take Cla as shown in (22).

(22) (a) səb<sup>h</sup>e kiṭab  
all book  
'all books'

(b) kuc<sup>h</sup> kiṭab  
some book  
'some books'

If Q is a head in Magahi, as we assumed, then Num-Cla movement across Q should be barred in Magahi because of the Head Movement Constraint (Travis 1984) or the notion of cyclicity (Chomsky 1995). Example (23a) shows unmarked order. Example (23b) shows that the Num-Cla can move across Q.

- (23) (a) hāmər kəʊno car go ləika  
 My any four cla boy
- (b) hāmər [car go<sub>i</sub>] kəʊno t<sub>i</sub> ləika  
 my four cla any boy

Based on the above syntactic behaviour, it can be concluded that Q is not a head in Magahi. One support for the claim that ‘Q cannot be the head’ comes from Giusti (1992). She shows that Q can either be the head of a quantified expression or a modifier of a noun phrase, i.e. it is generated in a specifier position of the noun phrase.

If Q is not a head and has a phrasal status in Magahi then where could it be generated in the Magahi noun phrase structure? Following Nchare (2011), I propose that Q projects its own functional projection and is generated at the specifier of that projection. To achieve this in bare phrase structure framework (BPS), I follow Giusti’s (1999) following economy principles:

(i) Principle of economy of lexical insertion:

A functional projection must be licensed at all levels of representation by

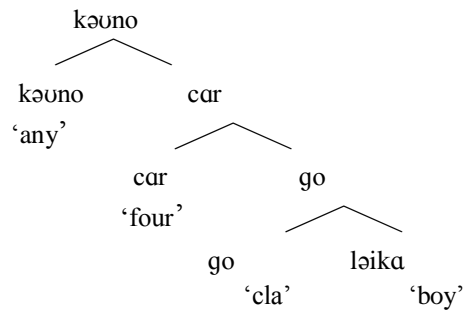
- (a) Making the specifier visible
- (b) Making the head visible

(ii) The interpretation of a noun phrase at LF is done in its higher specifier position.

In other words, in bare phrase structure, a functional projection is built only when either an XP is merged as its specifier or a functional element is merged in its head. The merge of an empty head is not sufficient to make the extended projection of the noun visible. However, application of this merge is that it creates a functional specifier position in the structure where the phrasal element is merged and projected as the level. This functional specifier becomes the locus of interpretation of the whole noun phrase.

The structure is presented in (24).

(24)



### 3.2.2 Adjectives, Demonstratives and Possessives in Magahi

#### 3.2.2.1 Adjectives

Like nominals, Magahi adjectives (Adjs) also have two distinct morphological forms: root or base form and inflected form. The inflected form is derived by the morpheme *-ka*. For example:

- (25)      root form      inflected form
- a) bəṭ<sup>h</sup>iũ 'good' > bəṭ<sup>h</sup>i-kə
- b) ləl 'red' > ləl-kə
- c) gəl 'round' > gəl-kə
- d) c<sup>h</sup>ot 'small' > c<sup>h</sup>ot-kə

Unlike Bosnian/Croatian/Serbian (Cinque 2010), both forms of Adj can be used as an attributive as well as predicative Adj as shown by (26)-(27):

- (26) (a) [ləl p<sup>h</sup>ul]      həi:  
           red flower      is  
           'This is a red flower.'
- (b) ʊnkər      p<sup>h</sup>ul-wa      [ ləl ] həi:  
           his      flower-PRT      red      is  
           'His flower is red.'

- (27) (a) [ləl-ka p<sup>h</sup>ul-wa] də.  
 red-SUF flower-PRT give  
 ‘Give me the red flower.’
- (b) ʊnkər p<sup>h</sup>ul-wa [ləl-ka] həi.  
 His flower-PRT red-SUF be  
 ‘His flower is the red one.’

There is no gender agreement between the root form of Adjs and nouns as in (28). However, the inflected form of Adjs agree in gender with the nouns as in (29a) & (29b).

- (28) kəriɑ ləikɑ/ ləiki:  
 black boy/girl  
 ‘a black boy/girl’

- (29) (a) kəri-ka ləikwa  
 black-SUF-M boy  
 ‘the black boy’

- (b) kəri-k-i: ləikia  
 black-SUF-F girl  
 ‘the black girl’

The root form has to be reduplicated (as in (30)) for number agreement, while the inflected form takes plural morphology -ən as in (31).

- (30) kəriya-kəriya ləiki:  
 black-black girl  
 ‘black girls’

- (31) kəri-k-ən ləik-w-ən  
 black-SUF-PL boy-PRT-PL  
 ‘the black boys’

Consider the examples (32)-(34). Examples (32) and (33) are grammatical, since Adjs agree with the form of nouns; example (34) is ungrammatical because there is no such agreement between Adj and noun. The difference between (32) and (33) is that (32) is a presupposed NP, thus specific definite, whereas (33) is non-presupposed NP, so non-specific.

(32) ləl-ka kiṭəb-wa  
 red-SUF book-PRT  
 ‘red book’

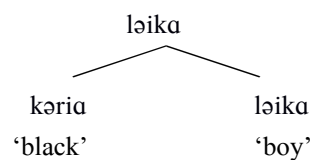
(33) lal kiṭəb  
 red book  
 ‘red book’

(34) \*lal kiṭəb-wa  
 red book-PRT  
 ‘red book’

From these examples, it seems that there must be an agreement between the Adj and noun in the presupposed familiar noun phrases. The inflected (i.e. presupposed) noun forms always take the inflected Adjs.<sup>2</sup> Thus, I conclude that the agreement between Adjs and nouns is obligatory in the presupposed noun phrases<sup>3</sup>.

To determine the syntactic status of adjectives in Magahi, I follow the hypothesis that adjectives are equivalent to adverbs in the nominal domain (see Bernstein 2001 among others). They are introduced in noun phrases through adjunction, in contrast to the view of adjectives occupying the specifiers of different functional projections (see Cinque 2002). We, then, have a simple noun phrase structure as in (35) where Adjs are introduced through an NP adjunction.

(35)



### 3.2.2.2 Demonstratives and possessives

Languages like English, Spanish and German do not allow demonstratives (Dem) and possessives (Poss) together in a noun phrase (Cardinaletti 1998). However, Magahi is one of those languages in

<sup>2</sup>There are languages such as Arabic (Kremers (2003), Al-humari (2010)), Maltese (Plank (1996), Hebrew ((Borer (1999), Sichel (2002) where there is definiteness agreement between Adjs and nouns in definite noun phrases. The definite article occurs on noun and is repeated in the appropriate allomorphic form on the Adj in terms of the absence vs. presence of the definite morphology.

<sup>3</sup>The same morpheme -ka is used with Adjs in Angika where it is analyzed as definiteness agreement between Adjs and nouns by Thakur (2000).



which Dem and Poss can co-occur as shown in (36).

- (36) həmər i: kiṭəb                      Poss-Dem-N  
       my this book

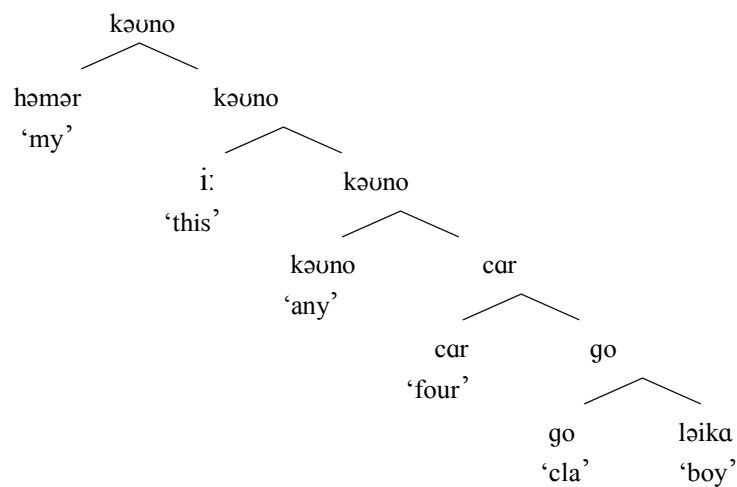
Like Q, the Num-Cla can also move across the Dem and Poss as shown in (37b), which questions the headedness of Dem and Poss in Magahi. Example (37a) shows the unmarked order.

- (37) (a) həmər i: kəuno car go ləika  
       my this any four cla boy
- (b) [car go]<sub>i</sub> həmər i: kəuno t<sub>i</sub> ləika  
       four cla my this any boy

Like my analysis of Q, I propose that Dems, Poss have phrasal status in Magahi. The view that Dems and Poss are not heads is well established in the literature – Bhattacharya (1999), Giusti (1997), Brugé (1996), Bernstein (1993) for Dem, and Giorgi & Longobardi (1991), Mallén (1992), Bhattacharya (1999) and others. If Dem and Poss are not heads and have a phrasal status in Magahi then where should they be placed in the structure? Example (37a) shows that in unmarked order Poss and Dem occupies a place higher than Q in the phrase. Also given that there is no DP projection in Magahi noun phrase, how could this order be obtained?

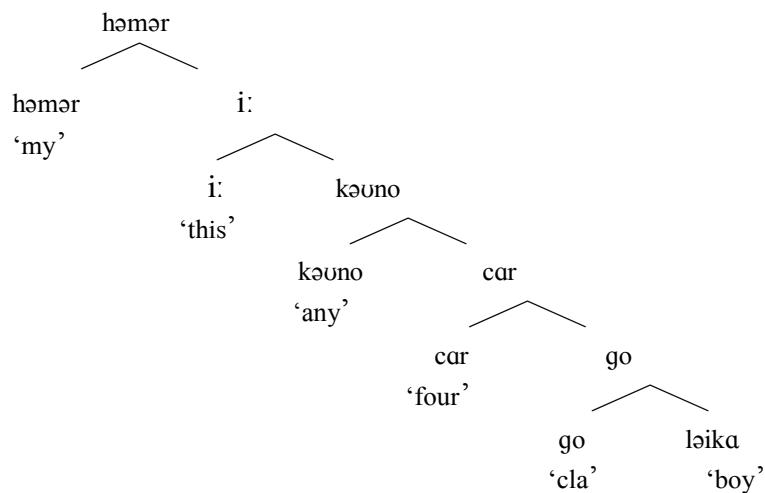
Assuming multiple specifiers, both Poss and Dem can be generated at [Spec, QP] as shown in (38).

(38)



This proposal can give an adequate account for permutation of Poss, Dem and Q within Magahi noun phrase; however, it is not able to capture some basic generalizations. For example, it does not give account of the licensing of possessive or genitive case within the noun phrase. Moreover, if we generate Dem at [Spec, QP], how will the deictic force of the demonstrative be captured. Finally, conceptually a Poss has nothing to do with a quantifier (see Bhattacharya 1999 for similar claim). Thus, like QP, following Nchare (2011) I project PossP and DemP above QP and generate Poss and Dem at [Spec, PossP] and [Spec, DemP] respectively. The revised structure is as in (39).

(39)



### 3.3 Phases in the analysis of the Magahi noun phrase

#### 3.3.1 Phase and the nominal phrases

Bošković (2010b) argues that DP is a phase in article languages, and NP is a phase in article-less languages. The NP/DP parameter states that DP is always projected in English. NP should then never count as a phase in article languages such as English. In article-less languages, since NP is the highest phrase it counts as the phasal projection. Below, I present a brief sketch of his arguments that the NP/DP parameter can be explained in terms of phases.

In the recent work in minimalist framework (Chomsky 2000, 2001), the derivation is assumed to be strongly cyclic. It proceeds phase by phase, where in each phase or cycle, the complement of the phasal head is not accessible for Move, which can only target the head and its specifier(s) for further

operations in the next phase. The idea is formulated as the Phase-Impenetrability Condition (PIC) in (40).

- (40) Phase-Impenetrability Condition (Chomsky 2001):  
 In a phase  $\alpha$  with head H, the domain of H is not accessible to operations outside  $\alpha$ ,  
 only H and its edge are accessible to such operations.

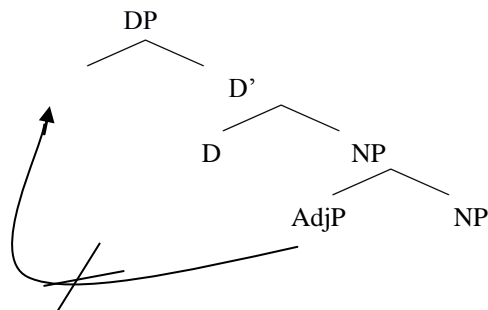
As a consequence of the PIC, movement out of a complement in a lower phase to a position in a high phase require that the category must first move to the specifier of the lower phase. At the same time, the notion of anti-locality disallows a movement that is too short. The anti-locality defines as in (c):

- (C) Anti-locality requires movement to cross at least one full phrasal boundary and not just a segment (Bošković , 2005b, 2010b, Abels 2003, and others).

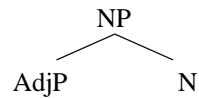
Left branch extraction LBE of an AdjP in article languages cannot occur because, given the PIC, the AdjP cannot move directly out of a DP. So, the AdjP must move to [Spec, DP]; however anti-locality condition bans this kind of a short movement of the AdjP to the [Spec, DP] as in (41a). The same account is given for adjunct extraction out of a noun phrase in article languages. Both phenomena are, however, allowed in article-less languages because the relevant elements are generated at the edge of the phase. It implies that there is no internal movement at all as it is in (41b). Thus, there is no anti-locality issue.

(41)

(a)



(b)



However, in cases where an additional phrase is projected in article-less languages, it is that additional phrase that becomes the phasal projection (“higher phrase as a phase” analysis of Bošković 2010b). Bošković (2010b) notices that Serbo-Croatian disallows LBE out of a complement of a noun (also true for Polish, Czech, cited in Bošković (2010b), also see Corver 1992 for detail) as in (42). In example (42a) the possessor can be extracted, but not in (42b). The reason of impossibility of extraction of NP in (42b) is that the PIC forces movement out of the higher NP to proceed via the Spec of higher NP. This step of movement, however, violates anti-locality.

(42) (a) On je vidio [NP [N' prijatelja [NP njegove [NP majke]]]].  
 he is seen friendACC hisGEN motherGEN  
 'He saw a friend of his mother.'

(b) \*Čijei je on vidio [NP [N' prijatelja [NP ti [NP majke]]]]?  
 whoseGEN is he seen friendACC motherGEN  
 'Whose mother did he see a friend of?'

(Bošković 2010b)

Thus, the higher NP in article-less languages blocks LBE just like DP blocks LBE in English. This shows that the additional projected NP has exactly the same effect on LBE as a DP in English; they both block LBE. This has been counted as evidence; wherever an additional phrase is projected above NP in article-less languages, this additional projection becomes a phase instead of the NP.

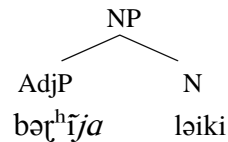
### 3.3.2 *The Magahi noun phrase and the Highest –phrase-as-phase analysis*

Magahi allows LBE and the adjunct attraction both out of the noun phrases (see chapter 2, section 2.3). These are both strong diagnostics for phase analysis of noun phrase (Bošković 2010b), so we can conclude that NP is a phase in Magahi. For example, the Adj  $bə\tau^h\dot{\iota}ja$  ‘good’ is extracted out of

NP in (43a). The Adj *bəɽ<sup>h</sup>ɿja* ‘good’ is generated as adjoined to the [Spec, NP] as in (43b), which means that there is no internal movement at all. Thus, there is no anti-locality issue.

- (43) (a) *bəɽ<sup>h</sup>ɿja*<sub>i</sub>    *həm*    [<sub>i</sub>    *ləiki:*]    *ɖək<sup>h</sup>li*.  
           good        I                    girl        saw  
           ‘I saw a beautiful girl.’

(b)



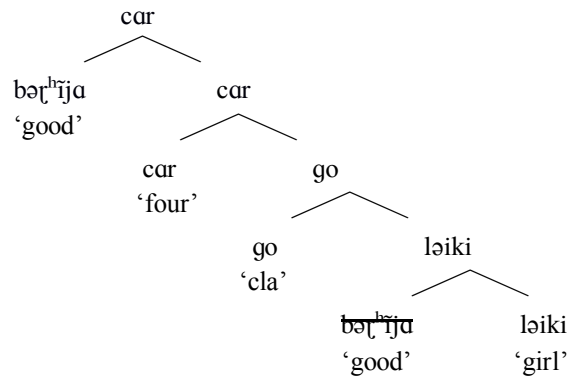
Extraction is allowed even when additional phrases such as QP or NumP are projected in the Magahi noun phrase, as in (44). Under the higher phrase as a phase analysis, QP or NumP should count as a phase in Magahi, just like DP in article languages does, and should ban the extraction.

- (44) (a) *bəɽ<sup>h</sup>ɿja*<sub>i</sub>    *həm*    [*car go* <sub>i</sub>    *ləiki:*]    *ɖək<sup>h</sup>li*.  
           good        I        four cla        girl        saw  
           ‘I saw four beautiful girls.’

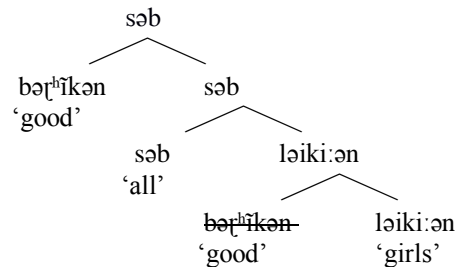
- (b) *bəɽ<sup>h</sup>ɿk-ən*<sub>i</sub>    *həm*    [*səb*    <sub>i</sub>    *ləiki:-ən*]    *ɖək<sup>h</sup>li:əi:*.  
           good-PL    I        all                    girl-PL    saw  
           ‘I saw all the beautiful girls.’

The reason behind this unexpected movement out of the NP is that numerals always bring additional functional structure, ClaP, which voids anti-locality, as in (45a). Recall that I have argued that the other prenominal components such as Qs, Dems etc. are generated at the specifiers of the relevant projections, i.e. they have a phrasal status. Therefore, movement of Adj does not violate anti-locality as it crosses the full phrasal boundary (rather than just a segment), and is then available for further operation out of phase under PIC. As an example, consider (45b), where the Adj *bəɽ<sup>h</sup>ɿja* ‘good’ is extracted in the presence of QP, because Q *səb* ‘all’ is generated at the [Spec, QP]. In the first step, the Adj *bəɽ<sup>h</sup>ɿja* ‘good’ moves and adjoins to the [Spec, QP] without violating anti-locality. In the second step, respecting PIC, it moves out of the QP.

(45) (a)



(b)



### 3.4 Some inflectional markers having semantics and pragmatics in Magahi noun phrase

Aggregative markers occur within noun phrase in almost all Indo-Aryan languages. In some languages they are realized as particles, and in some others as inflection or clitic (Thakur 2000). In Magahi noun phrases, the marker *-o* with the numerals functions as an aggregative. Example (46) illustrates this:

- (46) pāc-o kiṭṭab-w-ən  
 five-AGG book-PRT-PL  
 'all the five books'

When the marker *-o* is attached with an adjective, it functions as an inclusive marker which is similar to English *'also'*. For example:

- (47) cʰot-o kiṭṭab  
 small-AGG book  
 'also a small book'

The contrastive focus marker *-e* can be used with any element within the Magahi noun phrase for contrastive focus interpretation, such as with Poss (48a), Num (48b), Adj (48c) and Noun (48d). For example, in (48a) the possessive *həmərə* contrasts with other possessives i.e. my book not his/your's or somebody else's. The case with the numeral in (48b), with the Adj in (48c) and with the noun in (48d) is also similar .

- (48) (a) *həm̩r-e kiṭab*  
 my-FOC book  
 'my book (not your's)'
- (b) *pāc-e kiṭab*  
 five-FOC book  
 'only five books (not more)'
- (c) *bəṛ-e kiṭab*  
 big-FOC book  
 'a big book (not a small one)'
- (d) *pāc go kiṭab-e*  
 five cla book-FOC  
 'only five books (not pencil or pen)'

### 3.5 Pre-Poss COMP like position in Magahi noun phrases

Consider the word order in the nominal projections in (49) and (49'), comparing the position of the boldfaced constituent in (49') with its position in the unmarked order in (49). (All the phrases below have similar truth conditions. The constituent of (49) has been fronted to a pre-Poss position in (49'). In (49'a) the NP *lal kiṭab* 'red book', in (49'b) the AdjP *lal* 'red', (49'c) the noun *kiṭab* 'book', in (49'd) the Num-Cla *car go* 'four', in (49'e) the Num-Cla *car go* 'four' and the noun *kiṭab* 'book' and in (49'f) the poss *həmər* 'my' and the Num *car go* 'four' is fronted.

- (49) (a) *həmər car go lal kiṭab*  
 my four cla red book

- (49') (a) **lal kiṭəb** həməɾ cɑɾ go  
 red book my four cla
- (b) **lal** həməɾ cɑɾ go kiṭəb  
 red my four cla book
- (c) **kiṭəb** həməɾ cɑɾ go lal  
 book my four cla red
- (d) **cɑɾ go** həməɾ lal kiṭəb  
 four cla my red book
- (e) **cɑɾ go kiṭəb** həməɾ i:  
 four cla book my this
- (f) **həməɾ cɑɾ go** lal kiṭəb  
 my our cla red book

These examples presuppose discourse and a shared knowledge of a presupposed constituent. To characterise these orders as optional is however incorrect, as each order is licit only in a given context. To make this point more clear, let us take a situation where my brother Santi tore away four of my red books. I went to my mother all excited to complain about it. She was busy in the kitchen in cooking. I told my mother as in (50a) (remember this is unmarked order).

- (50) (a) səntia: [həməɾ cɑɾ go lal kiṭəb] p<sup>h</sup>ɑɾ ɖɛlkəu.  
 Santi my four cla red book tear gave  
 ‘Santi tore my four red books.’

As I was speaking, the pressure cooker whistled. As a result, she could not listen to me properly and so she asked “what has been torn?”. I answered:

- (b) səntia [lal kiṭəb həməɾ cɑɾ go] p<sup>h</sup>ɑɾ ɖɛlkəu.  
 Santi red book my four cla tear gave  
 ‘Santi tore my four red books.’



She again asked, “How many books have been torn?”. This time, replied as in (c).

- (c) səntiɑ [cɑr go hɑmər lɑl kiʈɑb] pʰɑʈ ɖɛlkəu.  
 Santi four cla my red book tear gave  
 ‘Santi tore my four red books.’

But this time again the cooker whistled and she was again not able to listen properly and so she asked again, “Whose, how many books have been torn?”. I replied:

- (d) səntɑ [hɑmər cɑr go lɑl kiʈɑb pʰɑʈ ɖɛlkəu.  
 Santi my four cla red book tear gave  
 ‘Santi tore my four red books.’

The fronting of constituents that takes place in (49’) & (50) brings that particular constituent into prominence. In other words, these scrambled constituents are interpreted as focused. However, this focus is not contrastive focus like the previous one; rather, it is non-contrastive in nature. It appears that focusP can be split into at least two different projections in Magahi: one for contrastive focus and other not marked for contrastiveness, but just for relevant information. Following Benincà and Poletto (2004) and Xu (2002), I call it ‘*informational focus*’ (IFCOUS). Moreover, the examples above provide an evidence for assuming that IFCOUS can allow multiple foci (like Hungarian in clause level), that can be a XP/XPs as in (49’a), (49’b), (49’d) and (49’f) or X<sup>o</sup> (49’c) or both as in (49’e).

In addition to the focus movement, the presupposed form of noun can be topicalized in Magahi as in example (51a). Example (51a) is different from above examples of (49’) & (50). It is uttered when i wish to continue to talk about the field. This kind of movement is not possible in Hindi as shown in (51b):

- (51) (a) trektərwa [ kʰeʈwɑ<sub>i</sub> hɑmər i: bəʈʰikɑ t<sub>i</sub> ] ʃoʈ ɖɛlkəi:  
 tractor field-PRT-TOP my this good plough gave
- (b) \* trektər-ne [kʰeʈ<sub>i</sub> meri je acʰi: t<sub>i</sub> ] ʃoʈ dɛli:  
 tractor-ERG field-TOP my this good plough put

Based on the above facts, I argue that the structure of Magahi noun phrase has a left periphery that hosts discourse related feature such as Topic and Focus. Two lines of research have been found in this area: Bernstein (2001) and Aboh (2004) correlates the interpretation of Topic and Focus position of noun phrase with the Topic, Focus features of the clause; however, Giusti (1996, 2005) suggests that the different constituent orders in the noun phrase show that clausal information structure cannot be tied with these movements. My study follows Giusti's approach, as I too suggest that the information structure of noun phrase functions differently than the information structure of clause. For example, we have seen in the last chapter that, to get Topic interpretation at clause level Magahi, like Hindi (Kidwai 2000), uses particle *to*. This does not mean that there is no interaction between the information structure of the noun phrase and the one in the clause. But, I keep myself away from this aspect in this dissertation, as it requires more specific research.

In phase based derivation, Chomsky (1995, 2000, 2001, 2008) assumes multiple Specs of a phase head (H) to capture the discourse related movement. According to Chomsky (2008), left-peripheral distinctions are a configurational derivative of internal merge (Move). Additional projections or features are not necessary. However, there are languages where these features are realized through inflectional morphology, thus implying that these features can be checked in situ, such as the realization of contrastive focus in Magahi. Moreover, if more than one element is moved to the left of the head of a phase for two different features without assuming two independent projections, a projection with multiple specifiers will not give an unambiguous projection (Gallego 2008). Let us then assume that a single head is not able to account for all left-peripheral distinctions. My aim in this dissertation is to put cartographies approach and Chomsky's phases together in bare phrase structure framework (also see Gallego 2007, 2008).

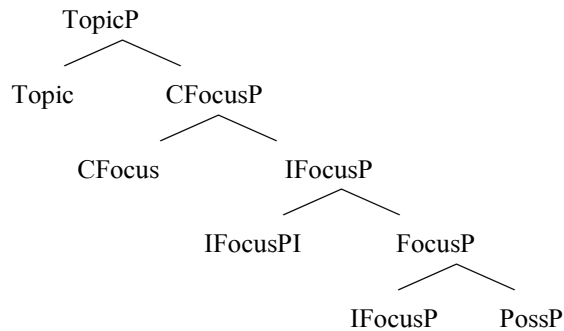
As per the recent developments in generative syntax, it is argued that if LF and PF are two opposite interfaces, and the derivation will converge if it converges at both interfaces, then the features, such as information structure, that are relevant to LF interface and trigger overt movement must be inserted prior to Spellout, otherwise, they could not be interpreted at LF (see Kidwai 2000, Giusti 2005). This trend of minimalist theorising assumes that the syntax starts with the numeration i.e. the lexical array that consists of lexical categories, functional categories and informational features such as [+topic] and [+focus] and proceeds putting these categories into computation by the operation

Merge. Discourse features are added arbitrarily to the lexical items when they are introduced into the numeration. In this view, the C-I system is responsible for both discourse and semantic interpretation and must be licensed by the derivation in the syntactic component (Rochemont 1986, Culicover & Rochemont 1991, Kidwai 2000, Giusti 2005, Aboh 2010).

Following these recent developments in generative grammar, I propose that discourse plays a role in selecting LIs for numeration. Chomsky (1995) proposes that the choice of an LI is a two-step process: (1) building up the numeration that contains LIs with its indices, and (2) introducing the assembled numeration into the derivation. I propose that the first step i.e. the selection of LIs in numeration is based on a speaker's proposition in a given discourse. The advantage of this proposal is that we can choose LIs or assign discourse feature to the LIs in the numeration itself. Or, alternatively we can introduce discourse feature in syntax without violating inclusiveness condition. Furthermore, I propose that licensing of Topic and Focus feature involves the checking of [TOPIC] and [FOCUS] in a topic and focus phrase generated immediately dominating PossP in the referential area of the proposed noun phrase structure (1). I follow Benincà and Poletto (2004) in suggesting that within the left periphery the highest projections are those that are already part of the information shared by the speaker and the hearer, and lower are the ones related to new information, as it is a well known fact that the basic organization of information goes exactly from given to new. Thus, these are also syntactically encoded from high to low which is presented in (52) and (53).

- (52) (a) The top most node is TopicP (because it shares known information in some sense  
(Benincà and Poletto 2004)
- (b) The second node stands for the contrastive focus (CFcousP) (because it selects an element inside a given set and excludes all other (Benincà and Poletto 2004) and
- (c) The third and lowest node stands for the informational focus (IFcousP)  
(Benincà and Poletto 2004).

(53)



The difference between CFocusP and IFocusP is that the former has no EPP feature, thus after checking, a [+CFocus constituent] stays in situ while latter has an EPP feature, thus a [+IFocus constituent] has to move to [Spec, IFocusP]. To capture this insight, I follow Kidwai (2000), and assume such heads as dormant heads. She defines dormancy as mentioned in (54).

(54) DORMANCY

A functional head is dormant iff its D-feature is not licensed in the numeration.

I propose that these heads are activated by adding [TOPIC] or [FOCUS] feature with XPs in the numeration. For example, if the [FOCUS] feature is added to a quantifier in the numeration, the IFocusP head is activated with the EPP feature and it piedpipes the QP. If [FOCUS] feature is added with the noun then the IFocusP head piedpipes the NP and so on.

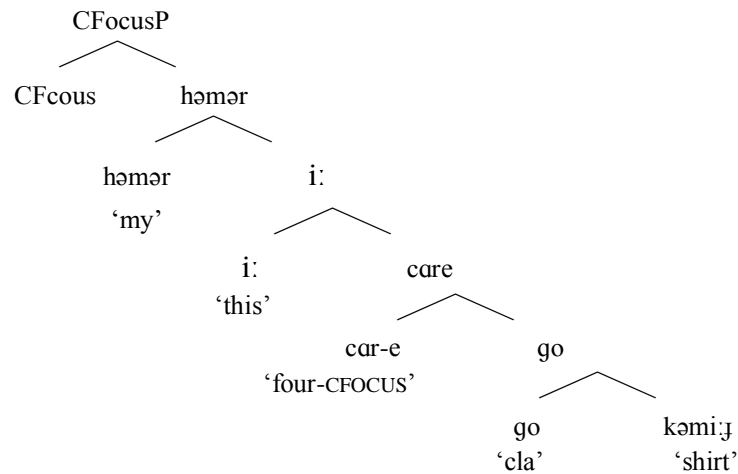
### 3.5.1 Data analysis

Let us now provide an account for the derivation of different syntactic nominal structures based on the proposal presented in the previous section. Consider first the derivation of the phrase (55a). Starting with the numeration in (55b), herein, when the Merge is successively applied, we reach the structure in (56) (ignoring irrelevant projections). The CFocusP has no EPP feature and thus the focused constituent Num stay in situ after its feature is checked.

(55) (a) həmər i: cār-e go kəmi:ʃ  
 my this four-FOC cla shirt

(b)  $N\{\{CFocus_1, Num_1, Cla_1\}, \{cār_e, go_1, kəmi:ʃ_1\}\}$

(56)

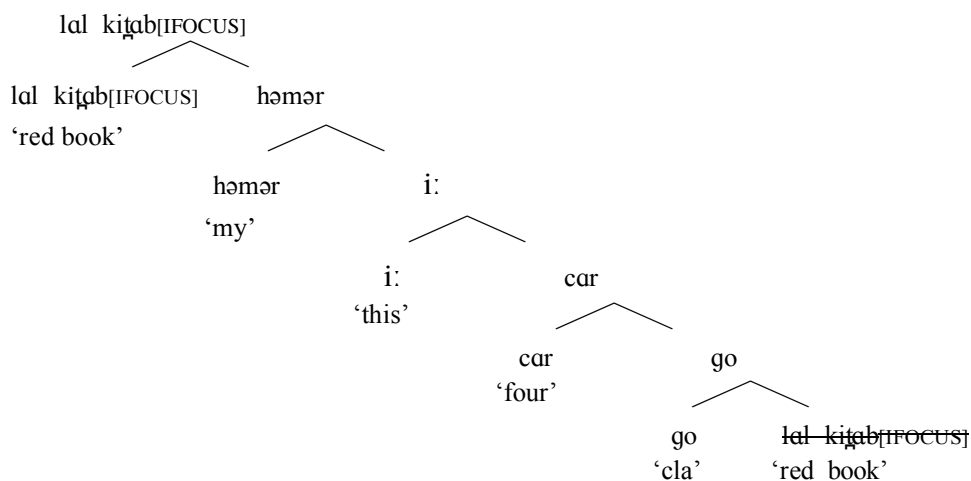


Consider the example (57a). Starting with the numeration in (57b) followed by successive application of merge, the structure (58) is derived. The IFocusP has an EPP feature and thus the focused constituent NP *lal kiṭab* moves to the [Spec, IFocusP].

(57) (a) lal kiṭab həmər i: cār go  
 red-FOC book-FOC my this our cla

(b)  $N\{\{IFocus_1, Num_1, Cla_1\}, \{cār_1, go_1, həmər_1, lal_{[IFOCUS]_1}, kiṭab_{[IFOCUS]_1}\}\}$

(58)

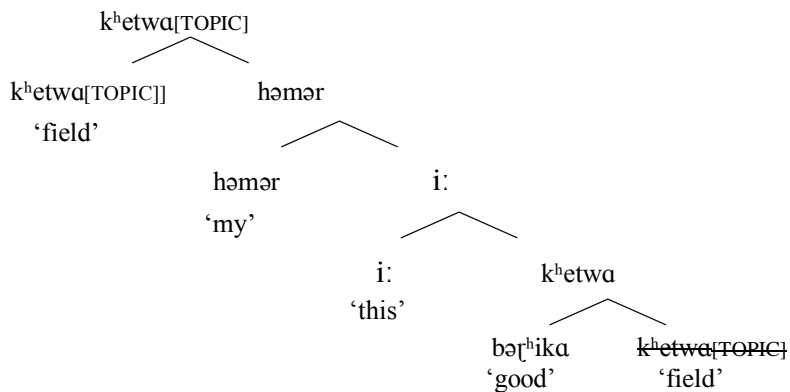


Finally, take the example (59a). Starting with the numeration in (59b), herein, when the Merge is successively applied, we reach the structure in (60). Due to the EPP feature of TopicP the noun *k<sup>h</sup>etwa* 'field' moves to the [Spec, TopicP].

(59) (a) *trektərwa* [ *k<sup>h</sup>etwa<sub>i</sub>*    *hāmər* *i:*    *bəṭika* *t<sub>i</sub>*]    *joṭ*    *ḍəlkəi:*.  
 tractor    field    my    this    good    plough    gave

(b) N    {{Topic<sub>1</sub>, Poss<sub>1</sub>, Dem<sub>1</sub>}, {*hāmər<sub>1</sub>*, *i:<sub>1</sub>*, *k<sup>h</sup>etwa*[TOPIC]<sub>*i*</sub>, *bəṭ<sup>h</sup>ika<sub>i</sub>*}}

(60)



### 3.6 Conclusion

The chapter has discussed the syntax, semantics and pragmatics of the Magahi noun phrases. It has reviewed the study of the internal structure of noun phrase and followed the layering hypothesis to propose the internal structure of Magahi noun phrase. Section 3.1 has reviewed Bhattacharya's (1999) work on the Bangla noun phrase. Section 3.2 has dealt with the Magahi noun phrase. I have shown that nominal cannot function as complement to a bare numeral without combining with the classifier *go*. I have argued that numeral and classifier are two distinct functional heads in Magahi. Quantifiers are modifiers in Magahi. It projects its own functional projection and is generated at the specifier of that projection. The next part of this section has dealt with the adjectives, demonstratives and possessives. I have argued that they are modifiers. Adjectives are generated within NP through NP adjunction. Demonstratives and possessives project their own functional projection and are generated at the specifier of those projections. Section 3.3 has analyzed Magahi noun phrase under 'highest phrase as a phase' analysis. I have argued that NP is a phase in Magahi. Section 3.4 has discussed some inflectional markers which show semantics and pragmatics. Finally section 3.5 has dealt with the information structure of Magahi noun phrase. I have proposed that Magahi noun phrases have a split referential layer inspired by Rizzi's (1997) split-CP hypothesis and Guisti's (2005) split DP hypothesis. However, it is a preliminary analysis and needs further investigation.





## Chapter 4

### Conclusion

#### 4.1 Summary and theoretical implications

In this dissertation, the structure and interpretation of Magahi noun phrase which lacks definite and indefinite articles have been investigated and several claims have been made.

The dissertation has claimed that there is no DP analysis of the Magahi noun phrase. It examined the suitability of analysis of Magahi noun phrase that have mainly been proposed by Abney (1987) in the light of the counter-arguments given by Dayal (2004, 2009) and Bošković (2005a, 2005b, 2008, 2009, 2010a, 2010b), claiming that all languages do not have Determiner Phrases. Following the hypothesis that definiteness is universal but its grammatical realization is language specific (Lyons 1999) I have argued that the universal concept of definiteness is not encoded in the syntactic representation of nominal phrases i.e. the functional category D in Magahi. We have seen that definiteness interpretations are achieved by bare nominals in this language, just as it is done in Hindi. The affective nominal particle *-wa* has been argued to be a marker of presuppositional familiar which does not constitute a functional projection in Magahi noun phrase.

Following Dayal, I have therefore argued that the Magahi noun phrase should be considered as NPs, with a covert type shift operation. The analysis of Magahi noun phrase supports Zlatić's (to appear) hypothesis that headedness of the noun phrase is related to the presence/absence of (in)definite articles in a given language. The theoretical implication of this analysis is that DP is not a principle of the Universal Grammar – rather, it is parameterized cross-linguistically.

The dissertation has also investigated a range of other functional categories in the nominal domain of the language. We have seen that Magahi numerals cannot be directly combined with the noun, and the Num head in this language must take the classifier *go* as its complement. We have also seen that syntactic and semantic behavior of the elements that are traditionally known as determiners in Magahi, the demonstratives, are quite distinct from D-items of article languages such as English, Swedish and German. I have

also argued that other pre-nominal components – possessive, demonstrative, quantifiers – are modifiers in Magahi noun phrase which are base-generated in the specifiers of PossP, DemP, and QP. This discussion shows that the absence of DP projection does not require a complete absence of all nominal functional projections. The theoretical implication of this analysis is that instead of having a unified structure to analyze the data we need a language-specific structure.

The dissertation has argued that parallel to clauses, Magahi noun phrases have a left periphery to host A-bar movement to serve information structure functions. I have argued that discourse related features are encoded in syntax, projecting their own function projection, and are matters of cross-linguistic variation. The dissertation has claimed that the information structure has direct access to syntax via the numeration. The discourse features can be added arbitrarily to LIs, like optional formal features. The proposed internal structure of Magahi noun phrases accounts for the information structure, the absence of (in)definite determiner and word order patterns maintaining the functional-lexical distinction.

Finally, the dissertation supports Bošković's hypothesis that NP is a phase in article-less languages.

## **4.2 Limitations and future work**

From a theoretical standpoint, this work doesn't address the issue of how the information structure of noun phrase interacts with the information structure of clause. The previous works such as those of Bernstein (2001) for English and Romance and Aboh (2004) for Gungbe have correlated the interpretation of left periphery position inside the noun phrase with the left periphery position of the clause. I follow Giusti's (2005) claims that movement of the component of noun phrase is somewhat independent of the information structure of the clause. However, following Giusti (2005), I have maintained that it does not mean that the information structure encoded within nominal projections may not interact with the one in the clause. But the dissertation does not explain this interaction. I have mostly dealt with Magahi data. The analyses are intended to hold universally, although they need to be verified cross-linguistically. In this respect, the dissertation raises more theoretical problems than it solves.

Moreover, this work does not provide an analysis for the all kinds of constructions of noun phrases. I have mostly left out the analysis of relative clause.

Furthermore, the presented work in this dissertation is only focused on the structure and interpretation of noun phrases. But there are hardly any theoretical studies available in this language till date. So there are so many other interesting areas that can be discovered in this language.



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