

Head Movement in Syntax

Rosmin Mathew

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Head Movement in Syntax
by Rosmin Mathew

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Abbreviations used in glosses

ACC:	Accusative
CONJ:	Conjunction
CONTR:	Contrastive
DAT:	Dative
LOC:	Locative
N:	Neuter
NEG:	Negation
P:	Person
PL:	Plural
Q:	Question Particle
QC:	Quotative Complementiser
REL:	Relativising element
SG:	Singular

Abstract

This book takes the position that head movement is a narrow syntactic phenomenon that can affect locality constraints thereby forcing certain phrasal elements such as a phrase containing a Wh to undergo movement.

The basic proposal explored here dates back to Chomsky (1986) where the movement of a verb is proposed to be able to affect and alter a barrier. This idea is translated into contemporary technical apparatus in this book to capture locality conditions, with Wh movement in Malayalam providing the necessary data to make a case for it.

The two constructions studied in the book present a contrast in terms of the position of the Wh. While the verb-final construction does not allow a Wh any freedom of movement, the *aanu* construction demands obligatory movement of certain Wh phrases to the pre-auxiliary position.

It is shown that the pivotal structural difference between the verb-final construction and the *aanu* construction pertains to verb movement. The verb undergoes V-to-C movement in a verb-final construction whereas the verb remains within the IP in an *aanu* construction. Following the Phase Impenetrability Condition (Chomsky 2001) coupled with the concept that head movement can extend barriers (Chomsky 1986), it is argued that the V-to-C movement in the verb-final construction results in extending the Phase domain up to the C level as opposed to the phase boundary instantiated by the low verb in an *aanu* construction. Thus, in a verb-final construction, the in-situ Wh is already within the purview of the licensing C_{INT} and does not need to move. However, in an *aanu* construction, the low verb creates a Phase boundary between the C_{INT} and the Wh, thereby rendering an in-situ Wh within the IP domain ungrammatical, forcing the Wh phrase to move to the C-domain.

It is also shown that in the case of Malayalam, analysing Wh movement as a sub-case of Focus movement is problematic. In short, the book argues for verb movement, and shows that it has important syntactic manifestations.

Table of contents

Acknowledgements	VII
Abbreviations used in glosses	IX
Abstract	XI
CHAPTER 1	
Introduction	1
CHAPTER 2	
SOV via head movement	7
2.1 Introduction	7
2.2 The position of the subject	8
2.3 The left edge	10
2.4 The position of the verb	14
2.5 Alternative analyses	16
2.6 Further evidence	20
2.7 Addressing concerns about using co-ordination as a diagnostic tool	24
2.8 Conclusion	29
CHAPTER 3	
<i>aanu</i> Construction	31
3.1 Function	32
3.2 Exhaustivity by presupposition	39
3.3 Clause structure	55
3.4 Summary	64
CHAPTER 4	
Wh in Malayalam – morphology	65
4.1 Wh and the pronominal paradigm	65
4.2 GoPro – pronominals and binding	66
4.3 Bound variable readings	74
4.4 Pro-noun, Pro-phi or Pro-DP?	81
4.5 Third person pronouns as inherently referential	83
4.6 Making an indeterminate pronoun	87
4.7 Wh = variable? Cole and Hermon (1998)	89
4.8 Summary	90

CHAPTER 5

Wh in interrogative constructions	91
5.1 Wh in the verb-final construction	92
5.2 Parallels between Wh and indefinites	94
5.3 Wh and quantificational force	98
5.4 A differing view: Jayaseelan (2001)	102
5.5 The <i>aanu</i> construction	107
5.6 Focus movement?	108
5.7 Wh movement in <i>aanu</i> construction is not triggered by a focus feature	111
5.8 Summary	113

CHAPTER 6

Positioning the Wh	115
6.1 Wh as quantifier	116
6.2 Chinese is not Japanese	118
6.3 Cable (2010)	121
6.4 In search of Q	124
6.5 Intervention effects	130
6.6 Conclusion	139

CHAPTER 7

In-situ versus movement	141
7.1 Feature driven movement	142
7.2 Being in the right domain: An alternative based on locality	147
7.3 Summary	159

CHAPTER 8

Conclusion	161
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CHAPTER 9

Afterword: Verb movement and word order	163
9.1 Greenberg's universe: Implications	163
9.2 Towards a minimalist account	164
9.3 Kayne (1994)	166
9.4 Brody (2000)	167
9.5 Haider (1993, 2000, 2010, 2013)	168
9.6 Summing Up	178

References	181
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Index	189
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CHAPTER 1

Introduction

The ways in which a Wh word is interpreted and takes scope have been an active point of discussion in linguistics. While some languages pronounce the Wh word in the position corresponding to the non-interrogative counterpart (e.g. Japanese) some languages pronounce the Wh in a different position (e.g. English) – the division usually described as Wh in-situ versus Wh movement languages. As the array of empirical observations makes obvious, neither in-situ nor movement classes are monolithic; they include a variety of languages and structures. For example, there are languages where the Wh word is in-situ, but a question particle appears at a scope-indicating position (e.g. Japanese), there are languages where adjunct Wh and argument Wh behave differently (e.g. Chinese), languages where the Wh sometimes undergoes partial movement (e.g. Malagasy) and so on.

One of the influential takes on Wh movement in languages like Hungarian was to reanalyse it as Focus movement. Also, a preverbal focus position seemed to be operative in the case of SOV languages in general. The Cartographic framework where elements pertaining to information structure found their own place in the functional sequence lent strength to proposals in this vein. ‘Association with Focus’, thus, presented itself as one way to go while dealing with Wh.

Another series of discussions in syntactic circles was about the syntactic effects of Head Movement. Arguments went back and forth. Movement of a verb was posited to have syntactic consequences in Chomsky (1986). But a decade and a half later, it was relegated to the “phonological branch of computation” in Chomsky (2001). Although clear instances like Scandinavian Object Shift provided powerful points for viewing head movement as having definitive syntactic consequences, there were conceptual issues raised about the viability of it within the Minimalist Program (see Roberts (2011) for an overview). It is in the context of this background that we look at the behaviour of Wh in Malayalam in connection with verb movement.

Malayalam is a Dravidian language spoken mainly in the Southern state of Kerala in India with more than 38 million speakers. It is a Nominative-Accusative language with the unmarked word order being SOV.

What makes Malayalam interesting is that it has two constructions where the Wh exhibits different behaviours. In one type of constructions that we will call

the verb-final constructions, the Wh is in-situ. These are finite clauses and we will use the term 'verb-final' to refer exclusively to finite clauses. A bare Wh in these constructions seems to be so immobile that it does not even undergo scrambling. The other construction – the *aanu* construction – calls for mandatory movement of the Wh to the C-domain,¹ without which the sentence is rendered ungrammatical. That is, we are faced with the surprising fact that Wh movement makes a verb-final construction ungrammatical while an *aanu* construction is ungrammatical without the movement. It should be noted that the morphological shape of the Wh word does not change; so it is difficult to postulate something on the basis of any particular feature on the Wh needing to be licensed in one construction, but not in the other, as a featural account might attempt to do.

Thus, we are rather left to explore the pivotal differences between the two constructions and to seek an answer from that perspective. We find that the major structural difference between the two constructions is the height to which the verb moves. Once we subscribe to the mainstream view that a Wh must get into a relation with the relevant C-domain element in order for the sentence to be grammatical, the observation about verb movement can be translated into a theoretical model where head movement has the syntactic consequence of altering the *a priori* Phase boundary at *v* to different heights giving rise to the differing strategies to achieve the Wh-C relation. The thesis presented in this book attempts an analysis of the different strategies observed in Malayalam vis-à-vis Wh movement (or lack thereof) based on the Phase Impenetrability Condition proposed by Chomsky (2001).

The Phase Impenetrability Condition (PIC) proposes that assuming Z and H are phase heads, in a configuration such as

$$[ZP \dots [{}_{HP} \alpha [H \ YP]]$$

the domain of H is not accessible to operations at ZP (DbP version of PIC). Combining this with the proposal over the years in various guises that verb movement has the immediate effect of extending the barrier/phase boundary (Chomsky 1986; Baker 1988; Den Dikken 2007; Gallego 2010 a.o.), I propose that verb movement to different heights in the verb-final and the *aanu* construction in Malayalam is responsible for the different behaviour of Wh in these two constructions.

To begin with, a bare Wh in Malayalam patterns more or less with indefinites, and does not have enough referential/quantificational force to undergo movement. This fact is made more pronounced by the observation that a Wh-Quantifier

1. This restriction is redundant in cases of Wh adverbials or reason clauses which can merge directly in the pre-auxiliary position in the C-domain.

compound, on the other hand, is able to undergo movement, say, past an intervener. This lack of quantificational force renders the Wh in-situ. The possibility of covert LF movement is ruled out by using Intervention effects (*a la* Beck 1996) as a diagnostic tool following Pesetsky (2000). This Wh in-situ is perfectly grammatical in a verb-final construction. However, an in-situ Wh leads to ungrammaticality in an *aanu* construction.

The question arises, then, as to what makes an otherwise legitimate in-situ Wh ungrammatical in an *aanu* construction.

We begin with the abstract proposal that the Wh needs to be in a relation with the relevant C-domain element – call it C_{INT} – for an interrogative sentence to be grammatical. This proposal has been made in the literature in various forms. The proposal put forward by Cable (2010) that this relation is mediated universally by a Q element is endorsed in this book. Thus, it is the QP and not the Wh *per se* that responds to the legitimacy requirements. The effectiveness of Intervention Effects shows that this relation is not achieved via covert phrasal movement of the QP. We argue that this relation operates in a Phase-bound manner in that the QP and the licensing C_{INT} need to be in the same domain for the licensing to happen.

In a verb-final construction the verb undergoes V-to-C movement. This prevents the universally proposed phase boundary at ν from being operational; the verb movement extends the boundary up to C. This leaves the in-situ QP within the single Phase domain induced by the verb in C, making it accessible for C_{INT} . As opposed to this, the verb in an *aanu* construction raises at most up to I, resulting in a Phase boundary at I. An auxiliary spells out the C elements, leaving the feature represented by C_{INT} and the in-situ QP within the IP in different domains. PIC is activated and an in-situ QP, say, in the object position, becomes inaccessible to the C_{INT} .

To avoid this unfavourable outcome, the QP must be positioned within the purview of the C_{INT} . As we saw in verb-final constructions, one way to achieve this is to extend the domain in which the in-situ QP is merged to include the C_{INT} , thereby bringing all the relevant elements within a single Phase. This is not a possible option for the *aanu* construction since an auxiliary spells out the C elements and the verb moves at most up to I. The second option would be to move the QP to the higher Phase, thereby rendering it visible to the C_{INT} . It is argued in this book that this is what happens in the *aanu* construction. A QP left in-situ is invisible for the C_{INT} because of the PIC and has to move to the C-domain. However, in a verb-final construction, V-to-C movement obliterates the otherwise plausible Phase boundary between C and an in-situ QP at, for example, the object position.

Thus, the book takes an explicit stand on the discussions mentioned in the beginning – the Wh movement in Malayalam, contrary to claims in the literature,

is not an instance of Focus induced movement. The question is addressed explicitly in the context of both the verb-final construction and the *aanu* construction. In case of the verb-final construction, what appears to be movement of a Wh to a preverbal focus position is shown to be a result of the indefinite Wh staying put while the other items that might otherwise appear between the Wh and the verb undergo movement. Although the *aanu* construction is often interpreted as involving focus it will be shown in Chapters 3 (generally) and 5 (specifically in the case of Wh movement) that the movement to the putative focus position cannot be triggered by a focus feature. In other words, as Fanselow (2007: p.209) notes, "Results of syntactic processes can be exploited by distinctions of information structure, but this does not show that these processes are triggered by them". It is the specific morphological/featural make-up of the Wh combined with the varying locality conditions arising as a direct syntactic effect of the head movement (verb movement in this case) that is responsible for the in-situ versus ex-situ behaviour of Wh in Malayalam.

The book is organized as follows: the second chapter presents arguments and data to show that V-to-C movement takes place in verb-final constructions. Chapter 3 discusses the *aanu* construction. It addresses the debate whether these are monoclausal or biclausal constructions. The chapter argues that the *aanu* construction is a subset of Categorical constructions (cf. Sasse 1987) and the strategy to mark the bipartite nature of Categorical readings by positioning the verb low are not exclusive to the *aanu* construction. It is argued that the verb can move at most to I in such a construction. The chapter also examines whether the Auxiliary must head a Foc projection or not. Chapter 4 explores the behaviour of the Wh in these two constructions in general. It will be shown that the Wh is indeed in-situ, contra Jayaseelan (2001) in verb-final constructions; that the Wh does not move to a preverbal focus position. Similarities between the behaviour of Wh and indefinites as well as the lack of quantificational force of a bare Wh word are also discussed in this chapter. The next chapter examines the morphology of Wh words. Taking the paradigmatic relation between elements in the pronominal system in general, it is shown that third person pronouns in Malayalam are pro-DPs in the sense of Déchaine and Wiltschko (2002), where the D part is spelled out by a deictic element. This deictic element is replaced by an unvalued element to make the pro-DP an open expression, yielding a Wh indeterminate pronoun. Different semantic properties can be derivationally achieved depending on the operator that takes this open expression as its complement to yield a QP. Chapter 6 attempts to give a bird's eye view on the relevant strands of analyses. Chapter 7 puts forward two possible analyses – one based on the assumption that Wh movement is in response to a focus feature and the other based on locality. This chapter entertains the idea that Wh movement is a sub-case of Focus movement in Malayalam and

shows the difficulties that such a proposal would face. The locality-based account is chosen as the simplest analysis with the least amount of *ad hoc* assumptions. Chapter 8 concludes the proposal presented in the book. Since the book argues for rightward head movement, a brief look into proposals on word order is given in the following chapter as an afterword. The first part of Chapter 9 is about the mainstream proposals. These are proposals that assume VO to be the basic structure. The second part is specifically about the proposal made by Huber Haider where OV is allowed to be the basic structure and explores the Haiderian framework on the basis of Malayalam data.

SOV via head movement

2.1 Introduction

The construction where a Wh exhibits in-situ behavior is of the form in (1) in the declarative format. We label them ‘verb-final constructions’. These are simple finite clauses, and throughout the book the term verb-final is used to refer to finite clauses.

- (1) Rajan Priyaye kandu
 Rajan Priya.ACC saw
 ‘Rajan saw Priya’

This construction shows a great deal of flexibility in the word order. The most important constraint on this freedom in the word order (though flexible under certain contexts) is that the verb has to occupy the clause-final position. For example, a sentence like 2 can have any of the following order in 3, 4, or 5. However, any order where the verb is not at the end of the clause leads to ungrammaticality.

- (2) Rajan Priyayku a: pu:chaye koduthu
 Rajan Priya.DAT that cat.ACC gave
 ‘Rajan gave that cat to Priya.’
- (3) Priyayku Rajan a: pu:chaye koduthu
- (4) Rajan a: pu:chaye Priyayku koduthu
- (5) a: pu:chaye Rajan Priyayku koduthu
- (6) *Rajan a: pu:chaye koduthu Priyayku
- (7) *Rajan koduthu Priyayku a: pu:chaye
- (8) *koduthu Rajan Priyayku a: pu:chaye

As shown in the above examples, as long as the verb is at the end of the sentence, all other elements in the sentence display a greater freedom of word order. Discussion of this kind of a relatively free word order known more commonly as ‘scrambling’ dates back to Ross (1967) who suggested that this is a stylistic operation. Apart from a movement approach, a base-generation account also was attempted. Based