

# **The Syntactic Effect of Head Movement**

Wh and Verb movement in Malayalam

---

**Rosmin Mathew**

*A dissertation for the degree of Philosophiae Doctor*

*February 2014*





**The Syntactic Effect of Head Movement**  
**Wh and Verb movement in Malayalam**

**Rosmin Mathew**



**A thesis submitted for the degree of Philosophiæ Doctor**

**University of Tromsø**

**Faculty of Humanities, Social Sciences and Education**

**Center for Advanced Study in Theoretical Linguistics**

**February 2014**



## Table of Contents

<b>Acknowledgements</b>	<b>7</b>
<b>Abbreviations used in glosses</b>	<b>11</b>
<b>Abstract</b>	<b>13</b>
<b>Chapter 1</b>	<b>15</b>
<i>Introduction</i>	<i>15</i>
<b>Chapter 2</b>	<b>20</b>
<i>SOV via Head Movement</i>	<i>20</i>
2.1 Introduction	20
2.2 The Position of the Subject	21
2.3 The Left Edge	23
2.4 The Position of the Verb	26
2.5 Alternative Analyses	29
2.6 Further Evidence	33
2.7 Addressing Concerns about Using Co-ordination as a Diagnostic Tool	37
2.8 Conclusion	42
<b>Chapter 3</b>	<b>43</b>
<i>aanu Construction</i>	<i>43</i>
3.1 Function	44
3.2 Exhaustivity by Presupposition	51
3.3 Clause Structure	68
3.4 Summary	77
<b>Chapter 4</b>	<b>78</b>
<i>Wh in Malayalam – Morphology</i>	<i>78</i>
4.1 Wh and the Pronominal Paradigm	78
4.2 GoPro – Pronominals and Binding	79
4.3 Bound Variable Readings	87
4.4 Pro-noun, Pro-phi or Pro-DP?	94
4.5 Third Person Pronouns as Inherently Referential	97
4.6 Making an Indeterminate Pronoun	101
4.7 Wh = Variable? Cole and Hermon (1998)	103
4.8 Summary	104
<b>Chapter 5</b>	<b>105</b>
<i>Wh in Interrogative Constructions</i>	<i>105</i>
5.1 Wh in the Verb-final Construction	106
5.2 Parallels between Wh and Indefinites	108
5.3 Wh and Quantificational Force	112
5.4 A Differing View: Jayaseelan (2001)	117
5.5 The <i>aanu</i> Construction	123
5.6 Focus Movement?	123
5.7 Wh Movement in <i>aanu</i> Construction is Not Triggered by a Focus Feature	127
5.8 Summary	129

<b>Chapter 6</b>	<b>130</b>
<i>Positioning the Wh</i>	130
6.1 Wh as Quantifier	131
6.2 Chinese is not Japanese.	133
6.3 Cable (2010)	136
6.4 In search of the Q	140
6.5 Intervention Effects	146
6.6 Conclusion	156
<b>Chapter 7</b>	<b>157</b>
<i>In-situ versus Movement</i>	157
7.1 Feature Driven Movement	158
7.2 Being in the Right Domain: An Alternative Based on Locality	164
7.3 Summary	176
<b>Chapter 8</b>	<b>177</b>
<i>Conclusion</i>	177
<b>References</b>	<b>179</b>

## Acknowledgements

I would like to begin with those without whom I would not have continued in Linguistics. Those who restored my faith in people. P. Madhavan, K.A. Jayaseelan, Theresa Biberauer, Ian Roberts and George Cardona. This thesis is my expression of gratitude to them.

When I came to Tromsø, I was still dealing with the trauma of a Ph.D. situation that I had undergone earlier; one that left me clinically depressed.

So when I write Peter Svenonius has been the perfect Supervisor, I truly mean it. The encouragement that he offered me while writing this thesis made it almost a therapeutic enterprise. I had applied to CASTL because I had listened to Peter at a couple of conferences and was hoping that I could work with him. Happy to say that that was one of the better decisions in my life. Apart from the regular meetings, he always (I mean, *always*) made time for consultation if I needed extra help; read thoroughly and commented on every little piece of this thesis as many times as it took for me to make it up to the mark. Thank you so very much, Peter.

I am grateful to Tarald Taraldsen and Michal Starke for the classes and conversations. Gillian Ramchand suffered from my sporadic appearances at her door. Thank you for the patient explanations and discussions, Gillian. Marit Westergaard has been the most understanding team leader that I have ever come across. You are a real leader, Marit. Antonio Fábregas discussed parts of the thesis at an earlier stage; Kaori and Naoyuki were kind enough to tolerate my attempts to establish that Japanese is indeed Malayalam. Thank you. Thanks to all my fellow researchers at CASTL over the years.

My knowledge of the subject greatly benefited from the time I spent at the Department of Linguistics at MIT. Of course, I wish I could drop Chomsky's name as something like "my discussions on head movement with Noam". Alas, most of the conversations were about what's happening in India and sometimes specifically about the local body elections in Kerala and West Bengal. Danny Fox's Syntax classes were a treat that I looked forward to. Anup said he had never seen me that excited about a class. Discussions with Sabine Iatridou and Norvin Richards helped different sections of the thesis. I am grateful to David Pesetsky for being my host at MIT and his extreme generosity with time. The weekly meetings were hugely motivating. The discussions played an important role in formulating my ideas explored in the following pages. Thank you. This thesis benefitted greatly from the meetings with Shigeru Miyagawa. Apart from the academic stuff, the weekly meetings were always so rich with conversations

ranging from how to write the thesis to visual arts and politics of architecture. Thank you so much, you raised everything to a different level.

There are many more who contributed to making this thesis what it is now. I thank all of them. In particular, I wish mention the following; if I have left out anyone that should have been here, it is not intentional. I would like to thank the participants at the cleft workshop in 2008 in Berlin, Workshop on Information Structure at GLOW 2010 in Poland, Islands in Contemporary Linguistic Theory in 2011 at Vitoria-Gasteiz, and FASAL 2 in 2012 at MIT for their comments and suggestions on various parts of the thesis. I am grateful for the opportunity I got to participate in the Colloquium at the University of Potsdam in December 2011. I appreciate the comments from the audience; particularly Luis Vicente on coordination. I very much appreciate the discussions with Julia Horvath, Caterina Donati and Marcel den Dikken – the arguments got refined because of that.

Many thanks for the comments and suggestion from Seth Cable who read the entire draft and offered a mock defense. The arguments were reinforced considerably due to Cable and made the thesis more tightly argued.

Anup Sam Ninan functioned as the permanent data provider and became part of the project so much so that towards the end of my Ph.D. he could explain this thesis to friends. Bent Gjersvik spent hours formatting the thesis while I partied. Sigfrid Kjeldaas collaborated with Bent in making the summary of this thesis available to the Norwegian speaking population from North to South.

Dékány Éva (see I put it in the right order ☺), you were not just an office mate, but a real friend. Thank you for being there during both personal and academic tough times. Alina Oboza is an office mate I can recommend any day. Sigfrid, Arlanda and Antonio — thank you for the understanding and explicit support throughout. Ben, thank you for being the pathological realist that you are. Gayatri, Lekha Nair, Ivonne – thanks.

Christin Kristofferesen, Tore Bentz and Elisabeth Eriksen facilitated the process at various stages. Jan Helge Bergheim and Jorun Nordmo quite often went beyond the call of duty to offer me help and support.

Dadeem Mommeem, as they are collectively known, love you. Anup saw and faced a lot with me over the years — no words to express all that. Hugs and more.

Aniyan-Sara-Meerammayi, Rajan-Priya and Carmen-Mayank have always been the stable bases. Liza Gazeeva – Jeg elsker deg. Kandala Singh – hugs, yaar. Stein-Are – thank you for that perfect holiday in the middle of writing.



As I told Bent, every one has the potential for being happy – all it takes is a self-reflective attitude. And a good therapist. Thank you Anne Grete Andersen.

Sanna Andersson, my personal angel, writing this thesis would have been a much more tedious phase without your constant encouragement and concrete support. And the lunchpacks and dinners. And the SMS reminders – Nandi Puzhu. Terhi Arola was always there to give that extra emotional push if I felt tired of writing.

Bent – for (being) the motivation and for providing the material conditions towards the end to finish the thesis so that I can get on with “a life in total happiness”. Thank you for letting me be myself, which is the best gift and support at any stage of life.



## 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 thesis 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 in the thesis 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 the thesis 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 thesis 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.

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





## 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 (eg. Japanese) some languages pronounce the Wh in a different position (eg: English) — the division usually described as Wh in-situ versus Wh movement languages. As the array of empirical observations makes obvious, both in-situ and movement classes are not 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 (eg: Japanese), there are languages where adjunct Wh and argument Wh behave differently (eg: Chinese), languages where the Wh sometimes undergoes partial movement (eg: 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 element 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 33 million speakers. It is a Nominative-Accusative language with the 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. 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<sup>1</sup>, 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 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. And 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. This thesis 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.

---

<sup>1</sup> 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.

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 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 the 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 thesis. 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 *v* 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<sub>INT</sub>. It is argued in this thesis that this is what happens in the *aanu* construction. A QP left in-situ is invisible for the C<sub>INT</sub> 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 thesis 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.

The thesis 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 form 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 analysis. 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. The last chapter concludes the thesis.

## Chapter 2

### 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’.

1. Rajan Priyaye kandu  
Rajan Priya.Acc saw  
‘Rajan saw Priya’

These constructions show 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 on examinations of “non-configurational” languages such as Warlpiri, Hale (1983) argued that free word order is base generated. However, some studies on languages like Japanese and German were more inclined to the movement approach and argued that scrambled orders are derived via



movement (eg. Grewendorf and Sabel 1999). The base generation approach was brought back by Fanselow (2001) vis-à-vis German word order. In the literature on Japanese, the phenomenon was often deemed as optional movement (e.g. Fukui 1993) and Saito (1989) argued it to be “semantically vacuous”. This view has been problematized later – for example, Meinunger (1995) observed for German that the scrambled nominal often bears a Topic function. In fact, with the rise of the Cartographic framework, many has come to see scrambling as an operation related to information structure properties, mainly Topic/Focus (Grewendorf 2005, Sabel and Saito 2005 a.o.). Within the minimalist framework, the question of whether this operation is a PF phenomenon also has been a point of debate. Apart from these standpoints, Grewendorf (2005) has argued that what has been labelled as “scrambling” can be better described as a cover term for different kinds of movement. In short, there is not much agreement in the literature on where exactly are the arguments in scrambled sentences. So we are left to explore the data pertaining to Malayalam and draw our own conclusions. I will not go into the details of all scrambling phenomena in Malayalam. This chapter would stick to object scrambling and show that there are instances of object scrambling that can be shown to be A-bar scrambling, to the C-domain. This scrambled position of the object will, in turn, be employed in determining the position of the verb in the clause.

The chapter is organised as follows: Section 2.2 looks into the position of the Subject followed by a discussion of the position of the object scrambled to the left edge in the next section. It will be shown in section 2.3 that the object can undergo A-bar scrambling to a Topic position in the C-domain. Section 2.4 deals with the position of the verb in these constructions. The next sections, 2.5 and 2.6 respectively, discusses the alternative analyses and further evidence for a verb raising analysis. Section 2.7 addresses some concerns about using co-ordination as a diagnostic tool.

## **2.2 The Position of the Subject**

The soft option would be to ‘assume’ that the subject is in [Spec, IP] following standard practice. However, there hasn’t been any explicit study that proves this to be the case for Malayalam. On the contrary, there is a proposal by Amritavalli and Jayaseelan (2005) that argues for the absence of TP as a distinct projection in the language. The scenario is complicated by the absence of overt evidence for A-movement. Malayalam is a radical pro-drop language (in the sense of Neeleman and Szendroi 2005) with no raising verbs like *seem*

or ECM verbs, all of which makes the EPP of TP a rather difficult notion to ‘assume’ *a priori*. Instead, I will show that the subject is necessarily outside the *vP*, without any commitment to the content of the projection at which it appears. The data comes from the licencing of an NPI.

Malayalam has two types of Negation – a negative auxiliary ( $be_{Neg}$ ) that immediately follows the verb (9) and a verbal affix (10).

9. Rajan uttharam paranj-illa  
 Rajan answer said-  $be_{Neg}$   
 ‘Rajan did not say the answer’
10. Rajan uttharam paray-aath-irunnu  
 Rajan answer say-Neg- $be_{Past}$   
 ‘Rajan did not say the answer’.

That  $be_{Neg}$  is higher than the subject can be surmised from its interaction with quantifiers:

11. a. ellaavarum vann-illa  
 all came- $be_{Neg}$   
 ‘Not all came’ Neg>All \*All>Neg
- b. ellaavarum vann-ill-engil  
 all came-  $be_{Neg}$  -if  
 ‘If not all of them comes’ Neg>All \*All>Neg

As opposed to this, when the Negation goes with the verb as in the following sentence, the quantifier scopes over negation.

12. ellaavarum var-aath-irunn-aal  
 all come-Neg-be-if  
 ‘If no one comes’ All>Neg

Clearly, the  $be_{Neg}$  takes scope over the Subject while the verbal affix does not, indicating that the  $be_{Neg}$  is higher than the quantified subject whereas the Neg verbal affix is below the subject.

In the following example, *onnum* and *a:rum* are the Object and Subject NPIs that can be licensed with the  $be_{Neg}$ ; their behaviour does not tell us anything about their relative positions.

13. Rajan onnum paranj-illa  
 Rajan nothing said- $be_{Neg}$   
 ‘Rajan said nothing’.

14. a:rum      uttharam      paranj-illa  
 Nobody    answer      said-be<sub>Neg</sub>  
 ‘Nobody said the answer’

The verbal affixal negation is more interesting since it appears in a less high position and thus has limited elements in its jurisdiction.

15. Rajan      onnum      paray-aath-irunnu  
 Rajan      nothing    say-Neg-be<sub>Past</sub>  
 ‘Rajan did not say anything’

The object NPI is clearly licensed by the verbal negative affix.

16. \*a:rum      uttharam      paray-aath-irunnu  
 noone      answer      say-Neg-be<sub>Past</sub>  
 ‘No one said the answer’
17. \*uttharam      a:rum      paray-aath-irunnu  
 answer      no one      say-Neg-be<sub>Past</sub>  
 ‘No one said the answer’

As opposed to (15), the Subject NPI cannot be licensed by this negation, despite the word order evidencing that the subject is indeed at a higher position than the object (cf. 16-17). This verbal negation affix can be attached only to an uninflected verb, even aspectual inflection cannot appear between the negative suffix and the verb. Hence, I conclude that the Neg affix is immediately above the *v*, and consequently, the subject which is outside this negation, is outside the *v*P. Notice that scrambling of the object to a position to the left of the Subject does not affect the judgement. I will not go into the question whether it is TP or MoodP or some other projection that the Subject moves to – in other words, I will stay away from discussing the feature composition of the projection where the subject appears. For the ease of presentation, I will adopt the label IP in the following discussion without any commitment to the exact content of the projection.

### 2.3 The Left Edge

We saw in examples 2-5 that scrambling is possible in Malayalam. An important fact to be noted in these sentences is that the first element in the sentence may be interpreted as the Topic. This Topic reading is unmistakable in the case of a non-subject at the left edge.

A Topic is something that has already been introduced into the discourse or something that the speaker wishes to foreground in the narrative. Unlike Languages like Japanese, Malayalam, does not have a designated Topic marker. Asher and Kumari (1997; p.183) notes for Malayalam that “[...] the position for Topic is the beginning of the sentence.” This is



It has been argued in the literature that the position to which elements scramble carry discourse-configurational features (see for eg. Grewendorf 2005) and in the case of scrambling to the left edge, it is unmistakably Topic as seen from the data presented above. Furthermore, cases where an indefinite nominal occupies the left edge, it gets the interpretation of a [+Specific] or [+Contrastive] or [+Partitive] NP. For example, a sentence similar to example (18) can be construed as grammatical in the following context. Context: There were two cats that were adopted the same day. A does not know who adopted the cats. B can inform A of the identity of the person with the following sentence, where ‘a cat’ gets a partitive specific interpretation.

28. oru pu:chaye      Rajan      kondupoyi  
       a cat.Acc          Rajan      took away  
       ‘Rajan took one cat’.

I will conclude that there is a position, TopP<sup>4</sup>, which hosts the leftmost argument in the examples above.

Now the issue is to determine the position of this Topic; i.e., whether this is A-scrambling or A-bar scrambling. First of all, not just nominal elements, but PPs, adverbs etc. also are perfectly grammatical in the left edge position indicating that this is A-bar scrambling. An example with a PP is given here:

29. Rajan      Priyaye      vi:ttil vechu      kandu.  
       Rajan      Priya.Acc home.Loc at      met.  
       ‘Rajan met Priya at home’.
30. vi:ttil vechu      Rajan      Priyaye      kandu.  
       home.Loc at      Rajan      Priya.Acc met.  
       ‘At home, Rajan met Priya.’

That is, the left edge topic position is at the C-domain. This is illustrated with a C-domain adverb ‘fortunately’ (cf. Cinque 1999).

31. Priyaye          bhagyathinu      Rajan      kandu  
       Priya.Acc      fortunately      Rajan      saw  
       ‘Priya, fortunately, Rajan saw (her)’

In this example, the scrambled object precedes the high adverb, showing that it is moving to a C-level position.

---

<sup>4</sup>We will not explore scrambling or the number of possible Topic positions here; the aim of the discussion here being to show that the scrambled object is dislocated to a Topic position at the C-domain. See for example, Frascarelli and Hinterholtz (2004) for a description of the available Topic positions in the C, T, and v domains.

This can be further substantiated using an explicit topic marker. Although there is no specific morpheme that marks a Topic in Malayalam, Asher and Kumari (1997; p.184) notes the following: “Thought the fact of a constituent of a sentence being in the initial position is sufficient to announce it as being the topic, a more explicit marker of topic is possible. In this case, the topic remains in the first place in the sentence but is followed by a reinforcing element [...].” One such element is *aanengil*.

32. a: pu:chaye    aanengil    Rajan    Priyayku    koduthu  
       that cat.Acc    be.if        Rajan    Priya.Dat    gave  
       ‘As for that cat, Rajan gave (it) to Priya’

The ungrammaticality of the following example makes for a minimal pair.

33. \*oru pu:chaye    aanengil    Rajan    Priyayku    koduthu  
       a cat.Acc        be.if        Rajan    Priya.Dat    gave  
       \*‘As for a cat, Rajan gave (it) to Priya’

Now, it is impossible to place *aanengil* at a lower position in the clause, showing that this marker explicitly marks a C-domain Topic.

34. \*Rajan    Priyayku    a: pu:chaye    aanengil    koduthu  
       Rajan    Priya.Dat    that cat.Acc    be.if        gave  
       ‘As for that cat, Rajan gave (it) to Priya’
35. \*Rajan    Priyayku    aanengil    a: pu:chaye    koduthu  
       Rajan    Priya.Dat    be.if        that cat.Acc    gave  
       ‘As to Priya, Rajan gave that cat (to her)’

In other words, there is indeed a Topic position available in the left periphery of Malayalam, *a la* Rizzi (1997), that an object scrambled to the left edge can occupy. Thus, I would be assuming an *ad hoc* minimal clause structure in (37) for Malayalam for the time being:

36. Priyaye    Rajan    kandu  
       Priya.Acc    Rajan    saw  
       Rajan saw Priya
37. [CP [TopP Priyaye<sub>i</sub> [IP Rajan ... [vP [VP t<sub>i</sub> kandu] v] ] ] C]

This leaves us with the position of the verb in the clause. We explore this below.

## 2.4 The Position of the Verb

Clearly, word order facts pertaining to the position of the arguments do not tell us much about the position of the verb. We already saw in the beginning from examples 1 – 8 that



Malayalam is a strictly verb final language. This makes it impossible to use adverbial positions as a diagnostic for the position occupied by the verb. Hence we need to look for other, perhaps indirect, clues to determine the position of the verb. In the section below, we use co-ordination as a diagnostic.

Take the following example:

38. Priya [<sub>&P</sub> [<sub>VP</sub> [<sub>VP</sub> Anupinu Rajaneyum] [<sub>VP</sub> Meerakku Aniyaneum]]]  
 Priya Anup.Dat Rajan.Acc.Conj Meera.Dat Aniyam.Acc.Conj  
 paricayappedutti  
 introduced  
 Lit: Priya [to Anup Rajan and to Meera Aniyam] introduced  
 ‘Priya introduced Rajan to Anup and Aniyam to Meera’

Assuming that only constituents can be co-ordinated, what we see above is the two internal arguments functioning as a constituent amenable to co-ordination to the exclusion of the verb and the subject. If we follow the canonical VP shell story (Larson 1988), this can happen only if the verb moves out of the VP, therefore, there should be at least predicate internal verb movement from V to v in Malayalam. The coordination of internal arguments and locative adjuncts further substantiate this point:

39. Rajan [<sub>&P</sub> [<sub>VP</sub> delhiyilekku pe:nayum] [<sub>VP</sub> osloyilekku mazhiyum]] ayachu  
 Rajan Delhi to pen.Conj Oslo to ink.Conj sent  
 Lit: Rajan [to Delhi pen and to Oslo ink] sent  
 ‘Rajan sent pen(s) to Delhi and ink to Oslo’

So far, the picture seems to be as following:

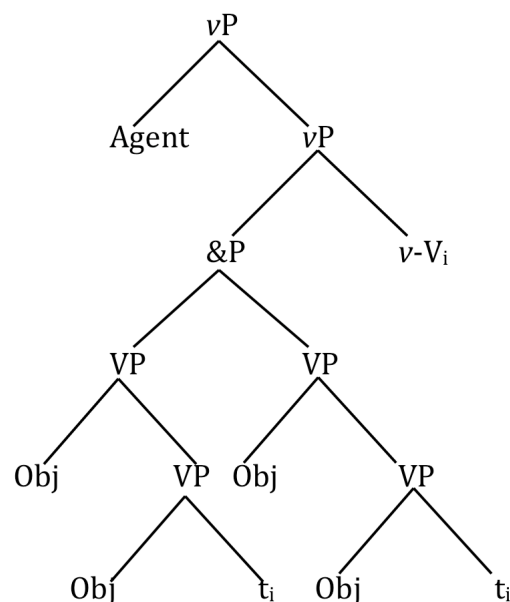


Fig:1

Does the verb move to a position above the subject as well? The next example certainly suggests that.

40. [<sub>&P</sub> [<sub>IP</sub> [Rajan Priyayeyum] [<sub>IP</sub> [Meera Aniyaneyum]]] kandu  
 Rajan Priya.Acc.Conj Meera Aniyam.Acc.Conj saw

Lit: Rajan Priya and Meera Aniyam saw

‘Rajan saw Priya and Meera saw Aniyam’

In the above example, the co-ordinated constituents have the subject and the object together, to the exclusion of the verb, suggesting that the verb moves to a position above the projection where the subject appears in the surface order.

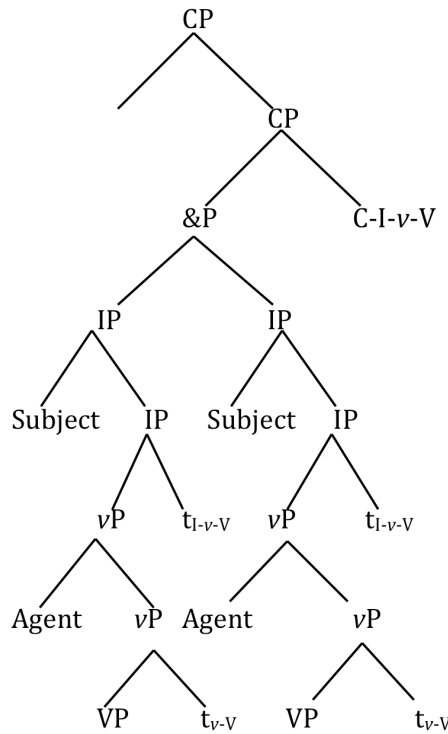


Fig: 2

As we discussed in the beginning, scrambling is possible in Malayalam, which means an object can precede the subject in a sentence. We also saw that this movement to the left is not semantically vacuous or totally unconstrained. The leftmost argument in the examples obeyed the rules of Topicalisation, and as we surmised in the previous section, it is at TopP, above the Subject position. This leads us to the next example:

41. [<sub>IP</sub> [Rajane Priyayum] [<sub>IP</sub> [Aniyane Meerayum]]] kandu  
 Rajan.Acc Priya.Conj Aniyam.Acc Meera.Conj saw

Lit: Rajan Priya and Aniyam Meera saw

‘Priya saw Rajan and Meera saw Aniyam’

42. [Rajane aane:l Priyayum] [Aniyane aane:l Meeraum] kandu  
 Rajan.Acc be.if Priya- Conj Aniyam.Acc be.if Meera.Conj saw  
 Lit: As for Rajan Priya and as for Aniyam Meera saw

‘As for Rajan, Priya saw him and as for Aniyam, Meera saw him’

In (41 and 42), the objects have moved to TopP, crossing the subject, and it must be at least the two TopPs that are co-ordinated here, further evidencing that the verb must have moved beyond the IP level and into C for this to be possible<sup>5</sup>.

The coordinated phrase allows for movement, as in the following example, showing that it is indeed a constituent and not a spurious surface phenomenon.

43. [ &P [Priya Rajaneum] [Meera Aniyaneum] ] Anupinu  
 Priya Rajan.Acc.Conj Meera Aniyam.Acc.Conj Anup.Dat  
 paricayappedutti  
 introduced

‘Priya introduced Rajan and Meera introduced Aniyam to Anup’

Thus the data presented above all point towards a V-to-C analysis. However, to be quite sure of adopting that analysis, we need to rule out alternative analyses concerning coordination of seemingly unobtainable constituents.

## 2.5 Alternative Analyses

### 2.5.1 Gapping

The Rule of Gapping (Ross 1967) refers to the process found in languages like English where the redundant parts in the second conjunct can be deleted as exemplified by the following pair of sentences:

44. Priya saw Rajan and Aniyam saw Meera

45. Priya saw Rajan and Aniyam, Meera.

A possible analysis of the sentences given in the previous section would be to show that they are instances of gapping where the repeated verb in the conjoined clauses is deleted as shown in the following hypothetical example (# is used to caution the reader that the sentence is a hypothetical one):

46. # [Priya Rajane kandum] [Aniyam Meeraye kandum] #  
 Priya Rajan.Acc saw.Conj Aniyam Meera.Acc saw.Conj

<sup>5</sup> It might be worth noting that the clauses that are coordinated must be of the same ‘type’ in that a clause with a topicalised object and a clause with a non-topicalised object lead to ungrammaticality:

\* Meeraye Rajanum Aniyam Priyayeyum kandu.  
 Meera.Acc Rajan.Conj Aniyam Priya.Acc.Conj saw.

to mean: Priya saw Rajan and Aniyam saw Meera

giving the following after deletion of identical elements:

47. #Priya Rajane ~~kand~~um Aniyam Meeraye kandum #

Now, there are two problems with this argument. The first one is pretty obvious – in the hypothetical (46/47) the conjunction marker is affixed to the verb in the second conjunct whereas in the grammatical sentence below, there is no conjunction marker on the verb:

48. [Priya Rajaneum] [Aniyam Meerayeyum] kandu  
 Priya Rajan.Acc.Conj Aniyam Meera.Acc.Conj saw

to mean: Priya saw Rajan and Aniyam saw Meera

The conjunction marker in Malayalam always suffixes to the last element of the conjoined phrases; it does not have infixal properties. Consequently, the above example makes it amply clear that the verb is definitely outside the conjoined phrases.

The second issue with this or any other argument which angles for a verb deletion account is that the hypothetical sentence we got by simply conjoining the two clauses is plain ungrammatical.

49. \*[Priya Rajane kand]um [Aniyam Meeraye kand]um  
 Priya Rajan.Acc saw.Conj Aniyam Meera.Acc saw.Conj

It has been observed in the literature that Dravidian languages do not allow the coordination of finite clauses (Anandan 1993; Asher and Kumari 1997, Jayaseelan 2001, Amritavalli and Jayaseelan 2005, Jayaseelan 2011). Thus, the question of conjunction of the two clauses followed by deletion of the repeated verb does not, in fact, arise at all.

More over, as Koizumi (2000) notes, if this indeed is a matter of deletion of identical elements, Gapping analysis would predict that any further movement operation involving the conjoined elements would invariably involve the verb in some way. Because, even though the verb is deleted in one of the conjuncts, it is still part of the other conjunct in a gapping/conjunction reduction analysis. So whatever happens to the conjoined phrase should affect the verb in a direct manner. This is definitely not the case in Malayalam, as the following example shows:

50. [&P [Priya Rajaneum] [Meera Aniyaneum]] Anupinu  
 Priya Rajan.Acc.Conj Meera Aniyam.Acc.Conj Anup.Dat  
 paricayappedutti  
 introduced

‘Priya introduced Rajan and Meera introduced Aniyam to Anup’

51. \* $[\&P [\text{Priya Rajaneum}] [\text{Meera Aniyaneum}] \text{paricayappedutti}]$

Priya Rajan.Acc.Conj Meera Aniyam.Acc.Conj introduced  
Anupinu  
Anup.Dat

‘Priya introduced Rajan and Meera introduced Aniyam to Anup’

In (50), the co-ordinated phrase undergoes movement as a whole, without affecting the verb in any manner. The sentence in (51) where the verb moves along the co-ordinated phrase is ungrammatical. This should not have been possible if the verb were part of either of the conjunct in the surface structure. The overt verb is clearly not a constituent of the conjoined phrases, deeming a verb raising analysis preferable. However, a sceptical reader can still act as the Devil’s advocate and point out that the examples above may not conclusively rule out a Right Node Raising analysis.

### 2.5.2 Right Node Raising

Right Node Raising (RNR) refers to constructions of the type where we find only a single overt instance of the element shared between two conjuncts.

52. Aniyam likes the university and Vipin hates the university

53. Aniyam likes, and Vipin hates, the university

(53) is an example of RNR where the repeated element, ‘the university’ appears only once in the sentence. Analyses of this phenomenon can be broadly categorised into three – ellipsis, movement and multidominance. Ellipsis based arguments (eg: Wexler and Culicover 1980) take (53) to be present at some point in the derivation, followed by the deletion (often argued to be phonological) of element(s) under an identity condition.

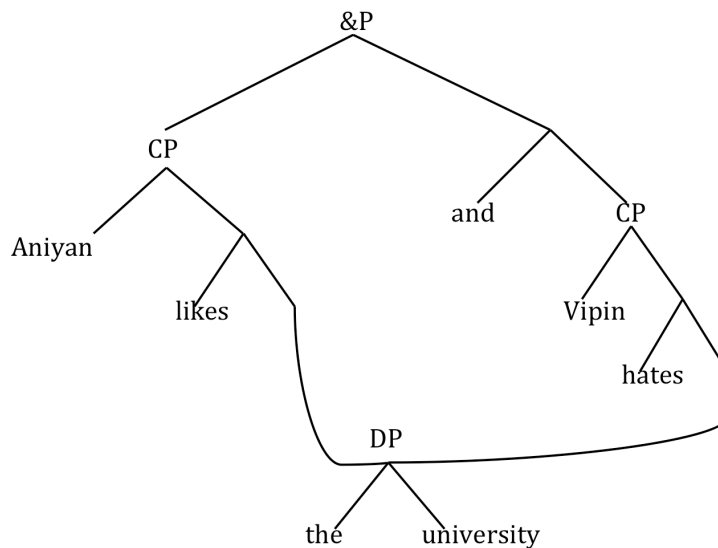
54. Aniyam likes ~~the university~~ and Vipin hates the university

Under a movement analysis, the repeated phrase undergoes rightward extraction and adjoins itself to the co-ordinated phrase<sup>6</sup> (e.g: Ross 1967, followed by many).

55.  $[\text{IP} [\&P [\text{IP Aniyam likes } t_i ] \text{ and } [\text{IP Vipin hates } t_i ]]] \text{the university}_i]$

In the Multidominance approach (e.g. De Vos and Vicente 2005, Bachrach and Katzir 2008) there is only one instance of the “shared material” which is merged into both the conjuncts as shown in the figure below (adapted from Larson 2011)

<sup>6</sup> RNR analyses that does not adjoin the verb to the conjoined constituent, but subscribe to an ATB type movement may be compatible with the analysis presented here.



In these approaches to RNR, it should be noted that the common element between the conjuncts is represented *as part of the conjuncts*, a point that came up earlier in our discussion of Gapping. As evidenced by the co-ordination affix explicitly marking the boundaries of the coordinated phrases excluding the verb and the movement of the coordinated phrase leaving the verb in its final position in the sentence (e.g. 46-49), the verb is not a part of either of the conjuncts, thus making a RNR analysis less preferred.

The Ellipsis account with PF deletion and the multidominance approach with the shared material are both out of question in analysing the co-ordination data presented in the previous section because such analyses have two finite clauses as the conjoined elements at some point in the derivation; a construction that is impossible in Malayalam as we saw in examples 46-47.

The movement approach cannot explain the data either even though it may seem more promising than the other two accounts because it predicts that the verb moves out of the conjoined phrases. However, the movement approach essentially argues for right adjunction to the coordinated phrase. This makes a prediction that movement operations that affect the co-ordinated phrase would find the verb being pulled along with the &P. However, this prediction turns out to be wrong, as we saw in example (51), reproduced below:

56. [<sub>&P</sub> [Priya Rajaneum] [Meera Aniyaneum]] Anupinu  
 Priya Rajan.Acc.Conj Meera Aniyan.Acc.Conj Anup.Dat  
 paricayappedutti  
 introduced  
 ‘Priya introduced Anup to Rajan and Aniyan to Meera’

57. \*<sub>&P</sub> [Priya Rajaneum] [Meera Aniyaneum] paricayappedutti]  
 Priya Rajan.Acc.Conj Meera Aniyam.Acc.Conj introduced  
 Anupinu  
 Anup.Dat

‘Priya introduced Anup to Rajan and Aniyam to Meera’

Thus, none of the alternative analyses explored here can convincingly explain the data. It should be noted that the argument here is not that these phenomena are entirely absent from the language. We will see, in section 2.7.2, exactly these phenomena appearing in the language in some other constructions.

### 2.5.3 *Optionality of operations*

Evidently, only a verb-raising analysis can account for the data. More over, Right Node raising and Gapping are, in the familiar examples, operations that are optionally possible in addition to the conjunction of two finite clauses. As we saw, conjunction of finite clauses is impossible in Malayalam. Thus neither RNR nor Gapping fit into the paradigm that Malayalam exemplifies.

## 2.6 Further Evidence

### 2.6.1 *V+Argument constituents*

Unlike English type languages where the verb and the object can form a constituent, we saw in the previous sections that the verb is always excluded from constituents that involved the arguments. In fact, the tense-inflected verb in Malayalam cannot form a constituent with its arguments. So constructions like the familiar (58) from English is impossible in Malayalam.

58. John ate a mango and drank milk

59. \*John maanga thinnum paalu kudichum

John mango ate.and milk drank.and

This is explained effortlessly if we accept that the verb is no longer present in the *vP* to form a constituent with its object. Consequently, a rather immediate concern would be to see if there are instances in the language where the verb stays in the *vP* and if so, whether forming a constituent with an argument is a viable option.

Indeed it is. When the tense information is realised by *do* support or an auxiliary, the verb appears in a form uninflected for tense and is able to form a constituent with the relevant argument.

60. Rajan maanga thinnukaum paalu kudikkukaum ceythu  
 Rajan mango eat.Conj milk drink.Conj did  
 Rajan ate a mango and drank milk

61. Rajane [Priya adikkukayum]  
 Rajan.Acc Priya hit<sub>nonfinite</sub>.Conj  
 [Aniyan idikkukayum] ceythu  
 Aniyan punch<sub>nonfinite</sub>.Conj did  
 'Priya hit and Aniyan punched Rajan'

*Do* support is extremely degraded when both the conjuncts have the same verb:

62. ??/\*[Priya Rajane kanukayum]  
 Priya Rajan.Acc see<sub>nonfinite</sub>.Conj  
 [Aniyan Meeraye kanukayum] ceythu  
 Aniyan Meera.Acc see<sub>nonfinite</sub>.Conj did  
 'Priya saw Rajan and Aniyan saw Meera'

Notice that English, where the verb does not move to I, allows for sentences like (63) where the tense information is carried by *do* support:

63. John did go home

Not surprisingly, these constructions are ungrammatical in Malayalam. It is ungrammatical to have an uninflected verb outside the coordinated phrase with *do* carrying the tense information.

64. \*John vi:ttil po:vuka ceythu  
 John home.Loc go<sub>nonfinite</sub> did

65. \*[Priya Rajaneum]  
 Priya Rajan.Acc.Conj  
 [Aniyan Meerayeyum] kaanuka ceythu  
 Aniyan Meera.Acc.Conj see<sub>nonfinite</sub> did  
 'Priya saw Rajan and Aniyan saw Meera'

When we have the verb forming a constituent with its argument(s), it mandatorily appears in a form uninflected for Tense. As a matter of fact, other forms of verb that are uninflected for tense also can be in a constituent relation with its argument(s).

66. Priya [Rajane adikka:rum]  
 Priya Rajan.Acc hit<sub>habitual</sub>.Conj  
 [Aniyane idikka:rum] undu  
 Aniyan.Acc punch<sub>habitual</sub>.Conj Auxiliary  
 'Priya usually hits Rajan and punches Aniyan'



Only the verb inflected for tense is unable to form a constituent with the arguments, providing further proof that the verb in a finite clause overtly rises to a position above the arguments.

### 2.6.2 Negation<sup>7</sup>

We saw elsewhere that the Negative Auxiliary obligatorily takes scope over a quantified Subject. The example is reproduced below:

67. ellaavarum	vann-illa	
all	came-	be <sub>Neg</sub>
Not all came		Neg>All *All>Neg

This, in itself, cannot constitute an argument for verb raising since the verb could be in a lower position with the Negative Auxiliary in a higher position, the linear adjacency being a red herring. To control for this, one can look at examples which involve constructions where the Auxiliary functions as the main verb of the sentence.

68. ellaa pusthakavum	ee sanchiyil	undu
all books	this bag.Loc	be
All books are in this bag.		
69. ellaa pusthakavum	ee sanchiyil	illa
all books	this bag.Loc	be <sub>Neg</sub>
Not all books are in this bag		Neg>All *All>Neg

To get the meaning where there aren't any books in the bag, one has to resort to an NPI:

70. oru pusthakavum	ee sanchiyil	illa
any book	this bag.Loc	be <sub>Neg</sub>
There isn't any book in this bag		

69 and 70 together shows that the verb, which in this case carries Negation also, is above the Subject.

<sup>7</sup> Han, Lidz and Musolino (2007) points out that negation in Korean has been used to argue for V-raising by Choi (1999). They go on to point out counterarguments to this by Chung and Park (1997) where the Subject QP indeed takes scope over the Negation and proposes that 'NPI licensing in Korean does not coincide with the scope of negation and so it has no bearing on the issue of V-raising' (p.9). However, this argument does not apply for Malayalam since (i) NPI licensing coincide with the scope of Negation and (ii) unlike Korean where a Quantified subject scopes over a Neg Auxiliary, it is the Negation that scopes over the Quantified subject in Malayalam as shown in section 1.

2.6.3 Question-Answer Pairs<sup>8</sup>

The answers to yes/no questions also suggest that the verb moves out of the vP and is very high in the clause. Consider the question-answer pairs below where the answer can be just the inflected verb.

71. Rajan      innale      viittil      pooyoo?  
       Rajan      yesterday home.Loc      went.Q  
       Did Rajan go home yesterday?

72. pooyi.  
       Went.

This kind of fragment answer is possible only if the verb moves to C, leaving behind all the arguments and the temporal adverb whereby the complement of C can be deleted. Of course, it could be argued that this is an extreme case of pro-drop where all the nominals in the sentence are realised as *pro* rather than whole phrases being deleted. Data from light verb constructions suggest that this may not be a case of pro-drop. Consider a negative answer to the question in (71). The answer can be given in two ways – with the verb moving to the Negation or just the Negation.

73. pooyilla.  
       Went.be<sub>Neg</sub>  
       Did not go.

74. illa.  
       be<sub>Neg</sub>  
       No.

Amritavalli and Jayaseelan (2005) have argued that *illa* in Malayalam encodes Finiteness<sup>9</sup>. Thus it seems that either the verb can move to the Fin projection, pick up the negative auxiliary *illa* and the rest of the sentence can be deleted as in (73). Alternatively, the verb can stay below and be in the phrase that is deleted, leaving only the negative auxiliary *illa*. Consider another example with a light verb. In a light verb construction, the finiteness and the temporal information are carried by the light verb (cf. 75-77).

75. Rajan Priyakku      kadha      paranju      koduthu  
       Rajan Priya.Dat      story      said      gave.  
       Rajan narrated a story to Priya.

<sup>8</sup> Many thanks to K.A. Jayaseelan for suggesting this.

<sup>9</sup> The paper is about the relation between Tense and finiteness in Dravidian.

76. Rajan Priyaykku kadha paranju kodukkum  
Rajan Priya.Dat story said will give.

Rajan will narrate a story to Priya.

77. Rajan Priyaykku kadha paranju kodukkunnu  
Rajan Priya.Dat story said give.

Rajan is narrating a story to Priya.

Now, if the following question is asked, the fragment answer needs only the light verb.

78. Rajan Priyaykku kadha paranju koduthoo?  
Rajan Priya.Dat story said gave.Q

Did Rajan narrate a story to Priya?

79. koduthu.

Gave.

Assuming that the light verb is at C, spelling out Fin, the data suggests that in the fragment answers that we saw above in (79), it is by virtue of its position at C that the inflected verb can function as a grammatical answer.

## 2.7 Addressing Concerns about Using Co-ordination as a Diagnostic Tool

The main diagnostic tool used here to detect verb movement is co-ordination, with the underlying assumption being only constituents can be co-ordinated. As mentioned before, Koizumi (2000) has used co-ordination as an argument for verb movement in Japanese. Fukui (2006), among other issues<sup>10</sup>, raised questions about the validity of Koizumi's assumption that co-ordination at the surface level always indicates constituency in Japanese.

### 2.7.1 *Some issues from Japanese*

Koizumi (2000) employs coordinated sentences of the following kind as an argument for ATB type V-to-C movement in Japanese.

80. [[Mary-ga John-ni ringo-o 2-tu] to [Nancy-ga  
[[Mary-Nom John-to apple.Acc 2-CL] and [Nancy-Nom  
Bob-ni banana-o 3-bon]]] ageta (koto).  
Bob-to banana.Acc 3-CL]] gave

Lit. '[Mary two apples to John] and [Nancy three bananas to Bob] gave.'

(Mary gave two apples to John, and Nancy gave three bananas to Bob.)

---

<sup>10</sup> The main argument of Fukui is whether functional categories are present in Japanese at all, and productive mechanisms to discover their existence instead of stipulating that functional categories are present in every language.



84. Taroo-ga      [Hanako-ni ringo 3-tu]      to [Kumiko-ni  
 [Taroo-Nom Hanako.Dat apple 3-CL]      and [Kumiko.Dat  
 banana-o 2-hon ]      katte-kuru-yooni tanon-da  
 banana.Acc 2-CL]      buy-bring-Aux      asked      (Fukui 2006, p.314)  
 Lit. Taro asked Hanako to buy and bring 3 apples and Kumiko to buy and bring 2  
 bananas.

The ‘constituent’ in the above example is made up of the object of the matrix verb and the object of the embedded verb. Even if we assume V-to-C/T movement, the constituency is, according to Fukui, left unexplained.

We see a similar structure in Malayalam as well:

85. Rajan    [ &P [Priyayo:du      oru pusthakavum]    [Anupino:du  
 Rajan Priya-Soc      a book.Conj      Anup-Soc  
 oru pencilum]]    kondu varaan paranju  
 a pencil.Conj    bring-Inf      said  
 Rajan asked Priya to bring a book and Anup to bring a pencil

86. [ &P [Rajan    Priyayo:du    oru pusthakavum]    [Aniyan  
 Rajan    Priya-Soc    a book.Conj      Aniyan  
 Anupino:duoru pencilum]]      kondu varaan    paranju  
 Anup-Soc a pencil.Conj      bring-Inf      said

Rajan asked Priya to bring a book and Aniyan asked Anup to bring a pencil.

Does this mean that we have to abandon our analysis so far or do we have an explanation for this strange constituent? Indeed we do, as shown in the next section.

### 2.7.2 A Case for RNR

Based on our analysis so far, we have the following structure for an embedded infinitival like the following:

87. [Rajan    Priyayo:du    [oru pusthakam    kondu varaan]    paranju  
 Rajan    Priya-Soc    a book      bring-Inf      said  
 Rajan asked Priya to bring a book.

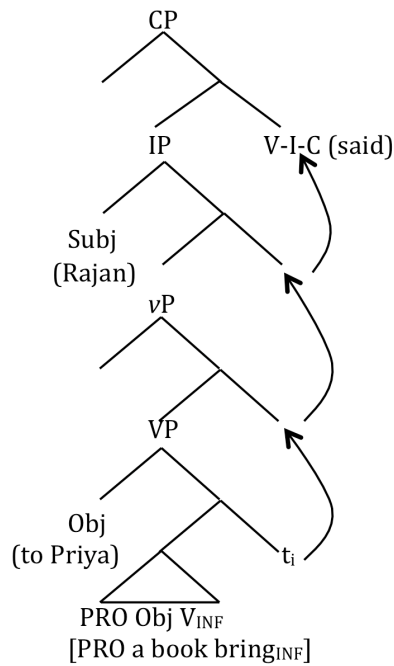


Fig:3

Now, if we were to coordinate the matrix vPs, we get the following sentence and corresponding structure:

88. Rajan [<sub>&P</sub> [<sub>vP</sub> Priyayo:du oru pusthakam konduvaraanum]  
 Rajan Priya-Soc a book bring-Inf .Conj  
 [<sub>vP</sub> Anupino:du oru pencil kondu varaanum]] paranju  
 Anup-Soc a pencil bring-Inf .Conj said  
 Rajan asked Priya to bring a book and Anup to bring a pencil

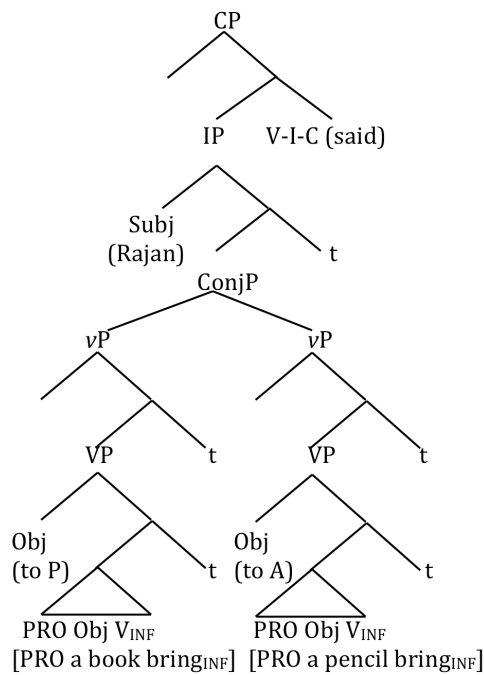


Fig:4

We observed earlier that for the verb-inflected-for-tense constructions Right Node Raising was not a viable analysis primarily due to two reasons: (i) the base structure of conjoining two finite clauses was ungrammatical and (ii) the verb did not behave as part of the conjoined clauses at any point (see examples 46-51; section 2.5). We shall see below that exactly these characteristics define the coordination of embedded infinitivals. To begin with, we can have the same infinitival repeating inside the coordinated clauses as in the above example. In the next example we see that Malayalam allows for the infinitival to appear once instead of repeating in both the conjuncts and in such cases the single occurrence of the infinitival appears outside the coordination marker *um*.

89. Rajan [<sub>&P</sub>[Priyayo:du oru pusthakavum] [Anupino:du  
Rajan Priya-Soc a book.Conj Anup-Soc  
oru pencilum]] kondu varaan paranju  
a pencil.Conj bring-Inf said

Rajan asked Priya to bring a book and Anup to bring a pencil

Furthermore, we see that when the coordinated phrase undergoes movement, the infinitival obligatorily moves along:

90. [[ [Priyayo:du oru pusthakavum] [Anupino:du  
Priya-Soc a book.Conj Anup-Soc  
oru pencilum]] kondu varaan ] Rajan paranju  
a pencil.Conj bring-Inf Rajan said

Rajan asked Priya to bring a book and Anup to bring a pencil

More over, failure of the infinitival to be adjoined to the coordinated phrase results in ungrammaticality:

91. \* [<sub>&P</sub>[Rajan oru pusthakavum] [Aniyan  
Rajan a book.Conj Aniyan  
oru pencilum]] Priyayo:du kondu varaan paranju  
a pencil.Conj Priya-Soc bring-Inf said

Rajan asked Priya to bring a book and Aniyan asked Priya to bring a pencil.

That is, all the tests that returned negative in the case of tensed verbs are now showing positive results in the case of embedded infinitivals; pointing to Right Node Raising. The structure we get is the following one where the repeated infinitival is adjoined to the coordinated phrase:

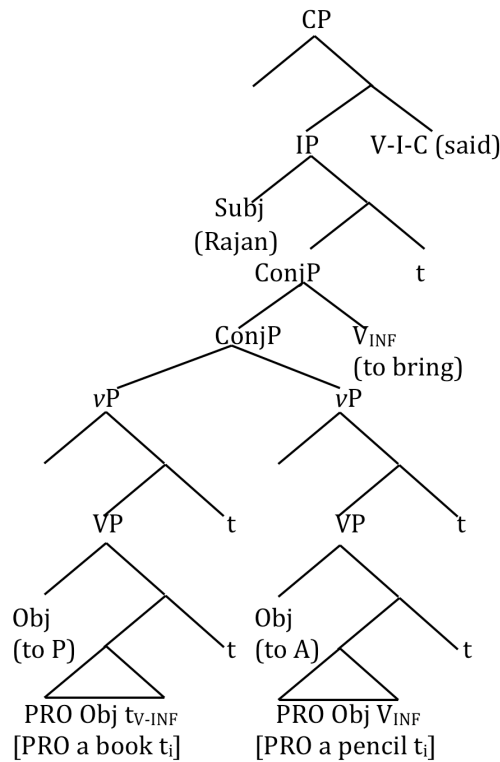


Fig:5

Thus, it turns out that Fukui's counterexample involving embedded infinitivals do not hold for Malayalam, and we can, after all, trust the coordination examples to a greater extent than in Japanese.

## 2.8 Conclusion

Co-ordination facts from Malayalam shows that the arguments can function as a constituent to the exclusion of the verb. Further more, as we saw in section 3.5, if the verb is to be made a part of a constituent consisting of the argument, it must appear in a non-finite form, precluding any movement to higher positions. Gapping or Right Node Raising analyses fail to account for the data as well as the non-optionalty of the construction. Thus, only a verb-raising analysis captures the range and nature of the data. We saw in the very first section that the constructions we are looking at exhibits strict verb final behaviour. This becomes entirely predictable if there is V-to-C movement in that even if there are right adjoining adjuncts, once the verb finishes its travel, it would invariably be at the final position since Malayalam is a head final language. Thus the verb is in the C domain in verb-final constructions.



### Chapter 3 *aanu* Construction

The construction type under discussion in this thesis where certain Wh words show mandatory *ex-situ* behaviour is of the form below:

1. aare        *aanu*        Priya        kandathu?  
Whom    be        Priya        saw.Sg.N.  
'Who is it that Priya saw?'
2. \*Priya    *aanu*        aare        kandathu?  
Priya    be        whom        saw.Sg.N.  
'Who is it that Priya saw?'

We examine this construction in detail in this chapter. At first glance, the above example may appear to be reminiscent of optional Wh movement in the context of Focus<sup>12</sup>. Indeed, the construction in (2) has been described as Cleft (cf. Madhavan 1987, Asher and Kumari 1997, Jayaseelan 2001). The term 'cleft' immediately brings to mind a biclausal structure. I will argue later in this chapter that the type of constructions exemplified in (2) should be treated as monoclausal. For this reason, I refrain from using the term 'cleft' even though the information structure properties are easily translated into English using It-Clefts in most of the cases. As Matthewson (2004, p.377) warns, the reader should be wary of the fact that "[...] any difference between the systems of the source language and the translation language can serve to obscure the true meaning of the source language sentences." Thus, the translation should not be taken to mean a one-to-one syntactic or semantic correlation between these constructions and the English It-Clefts. We examine the function, meaning and structure of the construction here.

The chapter is organised as follows: Section 3.1 explores the function of the construction and analyses them as Categorical constructions *a la* Sasse (1987). Section 3.2 explores the specific interpretations, especially the exhaustive reading. The section shows that the exhaustive interpretation is arrived by presupposition as opposed to exhaustive reading of Focus constructions attained via assertion. The next section 3.3 is about the clause structure. The argument that these constructions are biclausal is explored in detail and

---

<sup>12</sup> The question whether the Wh movement in (1) is Focus movement will be directly addressed directly in Chapter 5, section 5.6

refuted. We then move on to determining the position of the verb and the ends up with the structure of an *aanu* clause.

### 3.1 Function

Malayalam speakers tend to use this construction very prolifically which in itself might be slightly anomalous if this were a real cleft. As can be seen from the non-Wh example below, the sentences involve a bipartite structure with a clearly marked Predicate part and a clearly marked element the the predicate is about.

3. Rajane        aanu        Priya        kandathu.  
       Rajan.Acc be        Priya        saw.Sg.N.  
       ‘It is Rajan that Priya saw.’

Although the interpretative similarities with cleft constructions makes it easier to label the projection headed by *a:nu* as Focus, there are contexts where a continuing Topic (cf. Givón 1983) can appear quite naturally and felicitously in this position. The following conversation is an example of this.

4. A: entha:        ella:varum        Johninekkurichu        samsa:rikkunnathu?  
       What.be    everyone        John.about        talk.Sg.N.  
       ‘Why is it that everyone talks about John?’
5. B: avan a:nu    innale        ra:jane        kandathu. athukondu a:nu  
       He        be        yesterday Rajan.Acc saw.Sg.N. because    be.  
       ‘He is who saw Rajan yesterday. That is why (they are talking about him)’.

The felicitous answer in 5 elaborates on the topic that has been introduced in the question. Perhaps someone might feel inclined to propose that it is rather a case of contrastive focus than a continuing topic. Malayalam has a construction that is used to encode contrastive focus. However, a contrastive focus construction as in the following is less felicitous in this context, which shows that contrastivity is not really the point here.

6. B: #avane:    innale        ra:jane        kandullu:  
       He.Contr    yesterday        Rajan.Acc see<sub>root</sub>.be.Contr.  
       ‘Only he saw Rajan yesterday’.

If we define Focus as ‘new information’, the expected sentence would have been the following with the information ‘[e saw Rajan yesterday]’ in the Focus position.

7. innale ra:jane kandathu a:nu avan  
 yesterday Rajan.Acc saw.Sg.N. be he.

However, this is not a felicitous answer to A's question. This sentence is felicitous as an emphatic assertion that is equivalent to the English construction 'He did see Rajan yesterday'. The felicitous answer in 5 is rather B's judgment where the continuing topic 'John' hold true of the predicate [*innale ra:jane kandathu*].

More over, a phrase marked as Topic can occur at the pre-*aanu* position. Recall the *aane:l*<sup>13</sup> 'as for' topic phrases from last chapter. Phrases marked as topics by *aane:l* can grammatically and felicitously appear in the pre-*aanu* position.

Context: we need to gain entry to the club, but we are not members. So we plan to bribe the bouncer and are discussing the different bouncers the club usually employ.

8. Meera aane:l kuzhappam illa;  
 Meera be.if problem be<sub>Neg</sub>;  
 As for Meera, it is no problem;  
 Aniyam aane:laa nammal kudungunnathu.  
 Aniyam be.if.be we trapped.Sg.N.

Lit: It is as for Aniyam that we are going to be trapped.

'As for Aniyam, we will be trapped'.

That is, the typology is not simply about Focus constructions and non-Focus constructions. The distinction seems to be very clear along another aspect, that ofthetic versus categorical sentences (Sasse 1987) in that the construction under discussion forms a subset of Categoricals.

### 3.1.1 Sasse (1987)

Sasse (1987) – following up on the proposals by the 19th century philosophers Brentano and Marty and revived later by Kuroda (1972) – examines the distinction betweenthetic and categorical statements. "Categorical sentences contain a predication base about which some state of affairs is predicated, whilethetic sentences are simply nonpredicative assertions of states of affairs" (p.511). The classical Subject-Predicate bipartition is, in this system, a subcategory of categorical sentences. Kuroda (1972) attempted to show that this is the grammatical notion that distinguishes the *wa* marked sentences from the *ga* sentences in

---

<sup>13</sup> *aane:l* is the contracted form of *aanengil* used in spoken language.

Japanese. Ironing out the creases in Kuroda's arguments, Sasse provides a more tractable exposition of the thetic - categorical division. I follow Sasse (1987) here (Sasse, hereafter).

As Sasse points out, the distinction between thetic and categorical sentences are brought about through intonation in English. Japanese, according to Kuroda, exhibits this via the use of particles. As we saw in the previous chapter, the erb-final constructions can have a Topic reading which is one variety of Categoricals construction. Here we find another type of Categorical construction where the Predication base is marked explicitly. Below I reproduce some of the contexts in which the canonical unmarked verb-final word order of the thetic constructions contrast starkly with the *aanu* construction.

Q: What's new?

9. #Rajan      *aanu*      Priyaye      kandathu  
     Rajan      be          Priya.Acc    saw.Sg.N.  
     'It is Rajan who saw Priya'
10. Rajan      Priyaye      kandu  
     Rajan          Priya.Acc    saw  
     'Rajan saw Priya'

Q: How's the weather?

11. #mazha *aanu* peyyunnathu  
     rain    be    pour.Sg.N.
12. mazha peyyunnu  
     rain    pour  
     'It's raining'

Q: What was that?

13. #patti   *aanu*      kurachathu  
     dog      be          barked.Sg.N.  
     'It is the dog that barked'
14. patti    kurachu  
     dog      barked  
     A/The dog barked.

Q: What's wrong with you?

15. #naduvu   *aanu*   vedanikkunnathu  
     back      be      ache.Sg.N.  
     'It is my back that hurts'
16. naduvu    vedanikkinnu  
     back      ache  
     '(my) back hurts.

Q: Why are you so sad?

17. #ente pattikku *aanu*   sukham   illaathathu  
     my dog.Dat   be      well      be<sub>Neg</sub> .Sg.N.

'It is my dog that is unwell'

18. ente pattikku sukham-illa  
my dog.Dat well-be<sub>Neg</sub>  
'My dog is unwell'

Q: Who's singing outside?

19. #John paadunnu  
John sings  
'John is singing'
20. John aanu paadunnathu  
John be sing.Sg.N.  
'It is John who's singing outside'

Q: Who is absent today?

21. #John innu vannilla  
John today came- be<sub>Neg</sub>  
'John did not come today'
22. John aanu innu varaathathu  
John be today come-Neg.Sg.N.  
'It is John who did not come today'

Q: When did Rajan give you a book?:

23. # Rajan innale enikku oru pusthakam thannu  
Rajan yesterday to me a book gave  
'Rajan gave a book to me yesterday'
24. innale aanu Rajan enikku oru pusthakam thannathu  
yesterday be Rajan to me a book gave.Sg.N.  
'It is yesterday that Rajan gave me a book'

Q: How did Rajan get here?

25. #Rajan kaare:l vannu  
Rajan car.Loc came  
'Rajan came in a car'.
26. Rajan kaare:l a:nu vannathu  
Rajan car.Loc be came.Sg.N.  
'It is in a car that Rajan came'.

Q: Why did Rajan meet Anup?

27. #Rajan Anupine business.inte kaaryam parayaan kandu  
 Rajan Anup.Acc business.Gen matter to say saw  
 Rajan met Anup to discuss business affairs.

28. business.inte kaaryam parayaan aanu Rajan Anupine kandathu  
 business.Gen matter to say be Rajan Anup.Acc saw.Sg.N.  
 'It is to discuss business affairs that Rajan met Anup'.

As shown in the above examples, the construction under discussion is used when there is a strong presupposition that an event happened. This corroborates the claim that the *aanu* construction is categorical in nature. A number of other properties dovetail with the argument that the *aanu* sentences are categorical statements. To begin with, the examples of this structure, with or without the Auxiliary, are of a bipartite construal where the *V.athu*<sup>14</sup>

<sup>14</sup> It has been observed in Anandan (1985) that it would be more explanatory to decompose the inflection *athu* on the verb not as the .SgN pronoun, but as *a*, the distal marker and *thu*, the phi morphology for Sg.N. He observes that the morpheme *a* appears as a Relativiser in Relative Clauses and on the handful of adjectives in Malayalam which are fossilised Relative Clauses (see also Menon 2012 for a detailed analysis of the lack of adjectives in Malayalam). He proposes that the inflectional morphology on the verb in the construction under discussion is composed of this modificatory morpheme *a* and phi features. Keeping that in mind, let us now examine the *V.athu* phrase. First we see examples of a Relative Clause and an adjective below and see the nominalisation pattern.

1. John kanunn-a kutti  
 John see-a child  
 'The child whom John sees'
2. velutth-a patti  
 whitened-a dog  
 'White dog'

Now, it is possible to add the phi morphology and nominalise the extended verbal phrase and the adjective:

3. [John kutti-ye kanunn-a-th-ine] Rajan ethirtthu  
 John child.Acc see-a.Sg.N..Acc Rajan opposed  
 'Rajan opposed John's meeting the child'
4. velutth-a-thu enikku ve:nam  
 whitePst-a.Sg.N. 1P.Sg.Dat want  
 'I want the white one'

[*John kutti-ye kanunn-a-thu*] has been termed as a Headless Relative Clause in Asher and Kumari (1997). However, it is not so clear why it has been termed as a Relative Clause since the phrase does not behave like a Relative Clause. In (3), what is being opposed is not the Agent (Rajan) or the Patient (child), but the event. If we compare this to headless Relative Clauses in other languages, this becomes clear. For example, take the headless relativisation of an embedded subject in Imbabura, a Quechua II language spoken in northern Ecuador from Cole, Harbert and Hermon (1982):

5. [wambra wagra-ta randi - j] ali wambra - mi  
 boy cow.Acc buy-pres nom good boy - validator  
 'The boy who is buying the cow is a good boy'.
6. \*[wambra wagra-ta randi - j] ali wagra - mi  
 boy cow.Acc buy-pres nom good cow - validator

denotes a property, a predicate, that is ascribed to an entity, a predication base. Moreover, Sasse points out that “the grammatical relations of subject and predicate are not necessarily in a one-to-one relation to the more abstract notions of predication base and [...] predicate” (p.564). This is shown to be the case where the subject, object or an adverb can appear as the predication base, as shown below.

29. Rajan    *aanu*   Priyaye        kandathu  
       Rajan    be       Priya.Acc     saw.Sg.N.  
       ‘It is Rajan who saw Priya’
30. Priyaye   *aanu*       Rajan        kandathu  
       Priya.Acc be        Rajan        saw.Sg.N.  
       ‘It is Priya whom Rajan saw’
31. innale     *aanu*   Priyaye        Rajan        kandathu<sup>15</sup>  
       yesterday be       Priya.Acc     Rajan        saw.Sg.N.  
       ‘It is yesterday that Rajan saw Priya’

Since the predication base is an entity to which a property is ascribed, it is logically impossible to have a non-specific element function as the predication base. This is borne out in Malayalam by the ungrammaticality of non-specific elements appearing with the Auxiliary or in the comment position.

32. \**e:tho: ora:l*    *aanu*        Priyaye     kandathu  
       someone        be        Priya.Acc saw.Sg.N.  
       ‘It is someone who saw Priya’
33. \* Priyaye    kandathu   *e:tho: ora:l* (*aanu*).  
       ‘As for who saw Priya, it is someone’

Probably the most interesting side effect of this categorical construction in Malayalam is the Focus effects it exhibits. Substantiating Sasse, it is not exclusively New Information that is

---

7. [runa alcu-tajatu - j]                    ali runa } - mi  
       man dog.Acc sell-pres nom        good man - validator  
       ‘The man who is selling the dog is a good man’.

As we can see in the above examples, even though all the arguments appear within the Relative Clause, we can identify a particular argument as the head in these sentences. Headless does not simply mean no heads at all; it rather means the head appears in a different position than the more familiar Relative constructions. Clearly, there is no particular argument that can be singled out like this in (3) making it problematic to label it as a Relative Clause.

Also notice that there is no expletive in the construction. Thus, structurally, these constructions are very different from the biclausal It-clefts in English.

<sup>15</sup> The OSV order in this example is not particularly significant. The arguments can come in any order.

emphasised in these categorical sentences. More over, Sasse states “sentences including constituent focus must necessarily be categorical because they represent underlying identity statements whose predication base is the nonfocalised part of the sentence” (p.572). This is exactly the case with the *aanu* sentences in Malayalam where this construction is the only available strategy to express constituent negation. For example, (34) exemplifies negation in Malayalam, which is a case of sentential negation. The only way to express constituent negation is to use an *aanu* sentence as in (35).

34. Rajan Priyaye kandilla  
 Rajan Priya.Acc saw- be<sub>Neg</sub>  
 ‘Rajan did not see Priya’

35. Rajan alla Priyaye kandathu  
 Rajan be<sub>Neg</sub> Priya.Acc saw.Sg.N.  
 ‘It is not Rajan who saw Priya’

It is also worth noting that there is no way to express constituent negation using a thetic construction. Conversely, a Categorical sentence does not lend itself to sentential negation.

### 3.1.2 *An important difference*

A categorical construction, by definition, can be of a Topic-Comment structure as well as a Focus-Background structure. We analysed in somewhat detail the Topic position in a verb-final construction in the last chapter. Those sentences also can be subsumed under the label Categorical. However, those topicalised constructions differ from the *aanu* construction in that the verb-final sentences do not presuppose the predicate whereas the *aanu* construction (also modal constructions of a similar format that we will see in section 3.3) does so. As will be argued later in the chapter, the verb stays low in the *aanu* construction, with *aanu* at the C-domain as opposed to the verb-final constructions where the verb moves all the way up to the C. In other words, it would appear that the bipartite information structure is syntactically represented in the *aanu* construction by employing different verbal elements to represent the different realms.

The point that I would like to bring to the fore is that the verb-final sentences lack this sense of a strongly presupposed predicate. As shown in the discussion on Sasse (1987) in the previous section, the verb-final constructions, in their unmarked word order, function as thetic. This is possible because of the lack of any inherent presupposition. Along with this,



the verb-final constructions lend themselves to have a topical structure as well. On the other hand, an *aanu* sentence can never act as athetic precisely because of the inherently presupposed nature of the predicate. This presupposed nature of the predicate has certain ramifications. One of them pertains to the kind of exhaustivity that the construction encodes. We will see in the next section that the exhaustivity of the *aanu* construction is markedly different from the exhaustivity effect exhibited by, say, a contrastive focus construction.

## 3.2 Exhaustivity by Presupposition

### 3.2.1 Testing for Exhaustivity

The most commonly used test for Exhaustivity is the co-ordination test from Szabolcsi (1981, p.519-520). This test involves a minimal pair where the first sentence has a co-ordinated phrase at the focus and the second sentence has only one of the co-ordinated phrase at the focus. The focus expresses exhaustive identification if the second sentence is NOT among the logical consequences of the first one. If we have a co-ordinated phrase at the focus in a categorical sentence, it is interpreted as exhaustively identifying all the members of the set that holds true for the predicate. Thus (37) is NOT a felicitous follow up of (36) although we can ‘infer’ (38) from (36):

36. Pailyum    Karambium    aanu    vannathu  
      Paily.and   Karambi.and   be        came.Sg.N  
      ‘It is Paily and Karambi who came.’

37. Paily    a:nu    vannathu  
      Paily    be        came.Sg.N.  
      ‘It is Paily who came.’

38. Paily    vannu  
      Paily    came.  
      ‘Paily came.’

If one is to follow up with the information in (37), then (36) needs to be negated first (39), evidencing that (37) is not a logical follow up of (36):

39. alla, Paily    aanu    vannathu  
      no, Paily    be        came.Sg.N.  
      ‘No, it is Paily who came.’

Gryllia (2008) shows that collective and distributive interpretations of the co-ordinated phrase in a minimal pair like in the above test is crucial in determining whether the second sentence with only one of the co-ordinated phrase at the focus is a logical entailment of the first or not. Recalling Gamut (1991) she points out that the entailment pattern for co-ordination test is similar to the entailment pattern of test for collectivity. Consider the following minimal pairs.

40. Cheech and Chong are fun at parties

41. Cheech is fun at parties

In the above pair, (41) can be a logical consequence of (40) under a distributive reading of (40) where Cheech and Chong are fun at parties independent of each other. However, notice that under a collective interpretation of the co-ordinates phrases, (41) is not entailed by (40). This is the interpretation that Cheech and Chong are fun only when they together. Gryllia points out that in the test for exhaustivity, it is the exhaustive nature of the second sentence that blocks the entailment whereas in the test for collectivity, it is the collective nature of the first sentence with the coordinated phrases that blocks the entailment. An example that has a dominant collective reading of the coordinated phrases can bring out this point:

42. I like clotted cream and jam with scones.

43. I like jam with scones.

‘Clotted cream and jam’ is interpreted collectively and this results in (43) not being a logical consequence of (42). However, this does not mean that (40) and (42) are structures that obligatorily encode exhaustivity. This rather means that one should tease apart the instances of collectivity from exhaustivity. In order to do that, I employ a construction that has an obligatory distributive reading in Malayalam and use it in a categorical sentence.

44. Karambi    Devi.kk.um    Paily.kk.um    o:ro: pustakam    koduttu

Karambi    Devi.Dat.and    Paily.dat.and    a book each    gave

‘Karambi gave a book each to Devi and Paily.’

Now using this in a categorical sentence we get the following:

45. Devi.kk.um    Paily.kk.um    aanu    Karambi    o:ro: pustakam    koduttathu

Devi.Dat.and    Paily.Dat.and    be    Karambi    a book each    gave.Sg.N.

‘It is to Devi and Paily that Karambi gave a book each.’

Here we get the obligatory distributive interpretation where a total of two books have been given and Devi and Paily got a book each. However, (46) is still not a logical consequence of (45), showing that it is not a collective reading of the coordinated phrases that gives rise to the entailments.

46. Paily-kku aanu Karambi oru pustakam kodutt.athu  
 Paily.Dat be Karambi a book gave.Sg.N.  
 ‘It is to Paily that Karambi gave a book.’

However, Matthewson (2004) points out to some of the pitfalls of the above diagnostic procedure. She recommends a follow-up procedure, which actually weakens the exhaustivity reading in our case. To illustrate the point, it is infelicitous to follow up an utterance like in (42) above with the following utterance:

47. #Rajanum Karambi pustakam koduthu  
 Rajan.Dat.and Karambi book gave  
 ‘Karambi gave a book to Rajan, too.’

But, in carefully constructed contexts, the follow up becomes more felicitous. The one that I could come up with involves question-answer pairs. Consider the following context. My flat-mate knows that I had visitors last night. Generally she greets my guests. But last night she was asleep and did not meet the people. So she asks me:

48. Q: aaraa innale raathriyil vannathu?  
 Who.be yesterday night.Loc came.Sg.N.  
 ‘Who all came last night?’  
 A: Rajanum Priyayumaa vanne.  
 Rajan.Conj Priya.Conj.be came.Sg.N.  
 ‘It is Rajan and Priya who came’.  
 Aniy anum van nu. pakshe petten nu thirichu poyi.  
 Aniy an. Conj came. but soon back went  
 ‘Aniy an also came. But (he) went back soon’.

This should not have been possible if the exhaustive focus was the defining factor of the *aanu* construction. As it turns out, the exhaustive reading is derived from the presuppositional nature of the predicate rather than by assertion as one sees in a Focus construction.

### 3.2.2 *Emphasis, Focus and Exhaustivity*

The predication base in a Categorical construction receives an emphatic interpretation that is very much conducive to attributing it as a Focus construction. However, as we saw earlier, a continuing topic can function as the predication base. More importantly, the emphasis that the predication base derives is from the judgment being made about the

proposition (in the sense of Kuroda 2005) rather than focusing a particular element in the backdrop of possible alternatives.

The purpose of this section is to show that it is not prudent to assume *a priori* that *aanu* is a Foc projection. We examine the Focus reading obtained for a predication base in this construction; compare the reading with the mainstream definitions of Focus, and contrast it with a Focus construction that is in accordance with all the definitions that we saw. We conclude that while the Aux might have the interpretation of Foc in various contexts, it cannot be straightforwardly spelling out a Foc head.

### 3.2.2.1 Focus

Consider the context of selection of Ph.D. candidates. A and B are talking about it, and A makes the following statement with a Categorical construction:

49. avar Johnine a:nu select ceythathu  
 they John.Acc be select did.Sg.N.  
 'It is John whom they selected'

As a response to this, it is totally felicitous for B to come up with the following response:

B: appol, vereaarum illaayirunnu, alle?  
 then, different nobody be<sub>Neg.be.</sub>, be<sub>Neg.Q</sub>  
 'Then there wasn't anyone else, right?'  
 There might not have been any other applicants.

Not only does the Focus in Categorical constructions not presuppose an alternative set, it does not necessarily entail a subset of a presupposed alternative set either.

This is important to note since most of the mainstream definitions of Focus involve the notion of an alternative set. For example, After examining focus effects in five empirical domains in English – questions and answers, focusing adverbs, scalar implicatures, contrastive configurations, and bare remnant ellipsis – Rooth (1992) invokes the idea of an alternative set that

“[...] intonational focus in English has a uniform semantic import, which can be related to the intuitive notion of contrast within a set of alternative elements. The key to a uniform interpretation for focus is an interpretation principle which introduces a variable, thought of as a contrasting element or set of contrasting elements” (p.112).

Similarly, for the preverbal Focus position in Hungarian, É. Kiss (1998: 245) states that

“[identificational focus] represents a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold; it is identified as the exhaustive subset for which the predicate phrase actually holds”.

Thus, the existence of an alternative set is important to the definition of Focus. The presence of an alternative set is a crucial property in the definitions of (contrastive/exhaustive) Focus in Kenesei (1986) and Rooth (1992). Horvath (2010) explicitly states that

“The notion of exhaustive identification involved has an additional property (observed by Kensei, 1986): there must be at least one member in the contextually relevant set of alternatives that the predicate does not apply to. In other words, the operation attributed to EI crucially involves exclusion of a complementary subset.” (p.1360).

Krifka (2008) gives the following definition for Focus:

“Focus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions.” (p.247)

As we saw above, the presence of an alternative set is not particularly obligatory for a categorical construction. What’s more, there are contexts when the subset of a potential set is not felicitous as the predication base.

Imagine a context where 5 published articles would make John eligible for promotion. Unfortunately, John has only 3 published article and hence cannot get a promotion. It is the Contrastive Focus that one would use naturally in this context.

50. John 3 article-e: publish ceythitt-ull-u:

John 3 article-e: publish done-be-u:

'John has published only 3 articles'

It is infelicitous to use the Categorical construction here:

51. #John 3 articles a:nu publish ceythitt-ullathu

John 3 articles be publish done-be.Sg.N.

'It is 3 articles that John has published'

Despite the Exhaustive nature, *aanu* sentences contradict not just a Focus definition, but it runs counter to the definition of an Exhaustive Identificational-Operator (EI-Op) also. Horvath (2010) argues that Exhaustive Focus constructions involve an EI-Op, which is responsible for movement.

“*Exclusion by Exhaustive Identification (EI)* (modified version of É. Kiss’s (1998:249) characterization of identificational focus):

EI operates on a set of contextually or pragmatically given elements for which the predicate phrase can potentially hold; it identifies the exhaustive proper subset of this set for which the predicate phrase actually holds.” (p.1360).

The emphasized phrase (the predication base) in Categorical constructions is incompatible with the alternative set made up of potential holders of the proposition. This can be made clear by the following example – let’s get back to the football matches. As an answer to the question where an explicit potential set for which the proposition can hold is given, Categorical construction is infelicitous.

52. Quarter final-il Germanyum Brazilum undo:?  
 QF-Loc Germany.Conj Brazil.Conj be-Q  
 'Did Germany and Brazil make it to the QF?'

53. #illa, Brazil a:nu ullathu  
 no Brazil be be.Sg.N.  
 'No, it is Brazil who made it'

That is, what the *aanu* construction does is to have a presupposed predicate and select as predication base those elements for which the predicate holds without contrasting it with a potential set. The Exhaustivity of a Categorical Construction is obtained by presupposition while the Exhaustive reading of a truly contrastive construction is obtained via assertion. Thus, a Categorical construction presupposes the fact that there exists a set of elements that holds true for the predicate, and this set is the emphasized element(s) in the predication base. On the other hand, Focus in a Focus construction *asserts* Exhaustivity by asserting the exclusion of everything else i.e., it requires an alternative set that contrasts with the focused set.

### 3.2.2.2 A Focus Construction

An empirical exposition of this distinction could be brought to light using Contrastive Focus constructions in Malayalam. According to Rizzi (2013), “Contrastive focus introduces new information that contrasts with some natural expectation imputed to the interlocutor.” An example is given below.

54. Rajan ninne-e: kand-ull-u:  
 Rajan you.Acc-e: saw-be-u:  
 'Rajan saw only you'

Here, the natural expectation imputed to the interlocutor is that Rajan must have seen someone else or more than just the interlocutor. That expectation is contrasted in the above example<sup>16</sup>.

These sentences have a structure that is different from the two constructions we discussed so far. The focused item is suffixed with /-e:/. The suffix /-u:/ appears affixed to the root form of the auxiliary *ul-* whereas the inflected verb precedes the auxiliary. The auxiliary is obligatory because the suffix /-u:/ never affixes to an inflected verb.

55. \*Rajan ninne-e: kand-u:

Rajan you.Acc-e: saw-u:

'Rajan saw only you'

56. ninne-e: Rajan ka:nuka-ull-u:

You.Acc-e: Rajan see<sub>nonfinite</sub>.be<sub>root</sub>-u:

'Rajan sees/will see only you'

57. \*avan-e: vannu:

he-e: came-u:

'Only he came'

58. avan-e: vann-ull-u:

he-e: came-be-u:

'Only he came'

However, if the verb is uninflected, the suffix /-u:/ can be affixed directly to the verb:

59. ninne-e: Rajan ka:n-u:

You.Acc-e: Rajan see<sub>root</sub>-u:

'Rajan will see only you'

This construction encodes contrastivity. It means the existence of a membership set of relevant elements that identification operates on, identifying a proper subset for which the predicate holds, while excluding other members of the set (Horvath 2010).

For example, in the context of a Football Championship, the above construction is perfectly felicitous as an answer to the question below:

---

<sup>16</sup> The reader is cautioned that this interpretation differs from the interpretation of 'only' even though the sentences are translated using 'only'. Malayalam has a word *mathram*, corresponding to 'only', with similar semantics.

60. Quarter final-il Germanyum      Brazilum      undo:?  
 QF-Loc      Germany.Conj      Brazil.Conj      be-Q  
 'Did Germany and Brazil make it to the QF'?

61. illa, Barzil-e:      ullu:  
 no, Brazil-e:      be<sub>root</sub>-u:  
 'No, only Brazil made it'.

That is, contrastive focus demands a set of alternatives to operate upon<sup>17</sup>. What's more, Contrastive Focus constructions always imply that there is a set of potential alternatives that are excluded by the identification.

Consider a context where A and B are talking about the selection of new Ph.D. Students and A makes the following statement:

62. avar      Johnine-e:      select ceyth-ull-u:  
 they      John.Acc.e:      select did-be-u:  
 'They selected only John'

Here, it is completely infelicitous for B to come up with the following comments since the use of Contrastive Focus clearly implies that there indeed was a set made up of other candidates who did not get selected.

63. #Were there other applicants?  
 #There might not have been any other applicants.

Furthermore, this constraint of having a set from which to choose might also be responsible for the inability of non-specific elements to appear in the contrastive focus position. For example, it is infelicitous to use the Contrastive Focus in a context where I am circling a parking lot, looking for just any parking space:

64. #nja:n      oru      parking space-e:      no:kkunn-ull-u:  
 I      one      parking space-e:      look for-be-u:  
 'I am looking for only a parking space'

In short, this construction is a text-book case of Focus, true to the definitions we have examined in the previous section.

---

<sup>17</sup> This is generally in line with Rooth (1996). However, for a different view, see Zimmerman (2008).





### 3.2.3 Exhaustivity – by assertion and by presupposition

Now we can return to our claim that a Categorical construction presupposes the fact that the emphasized element(s) in the predication base form an Exhaustive set for which the predicate holds, whereas Focus in a truly Focus construction *asserts* Exhaustivity by asserting the exclusion of potential members i.e., it requires an alternative set that contrasts with the focused set.

We saw that the *aanu* construction does not need an alternative set; there are contexts where the presence of an alternative set is infelicitous for an *aanu* construction. Contrastive Focus, on the other hand, mandatorily needs an alternative set. A prediction based on this would be that Contrastive Focus is incompatible with predicates that force single membered sets – i.e., with predicates where the uniqueness of the selected set is presupposed – while Categorical constructions make natural choices to express such information. This can be substantiated through the following examples.

The *aanu* construction is used talking about a winner, or one who arrived first. Contrastive Focus is infelicitous in these contexts.

70. Euro cup Spaininu a:nu kittiyathu  
 Euro cup Spain.Dat be got.Sg.N.  
 'It is Spain who won the Euro cup'

71. #Spainin-e: kitti-ull-u:  
 Spain.Dat-e: got-be-u:  
 'Only Spain won'.

72. John a:nu a:dyam ettiyathu  
 John be first arrived.Sg.N.  
 'It is John who arrived first'

73. \* John-e: a:dyam etti-ull-u:  
 John-e: first arrived-be-u:  
 'Only John arrived first'

The same holds true for authors of books.

74. Blacklist a:rude puthakam a:nu?  
 Blacklist whose book be  
 Lit: Whose book is Blacklist?  
 Who is the author of Blacklist?

75. Sara Paretsky a:nu Blacklist eZhuthiyathu  
 Sara Paretsky be Blacklist wrote.Sg.N.  
 'It is SP who wrote Blacklist'
76. #Sara Paretsky-e: Blacklist eZuthi-ull-u:  
 Sara Paretsky-e: Blacklist wrote-be-u:  
 'Only SP wrote Blacklist'

In fact, the restriction on single membered set is so strong that it could result in blasphemy if one is not careful. To use the Contrastive Focus in the following sentence is tantamount to saying that the inclusion of 'Mary' in the focused set is asserted as exhaustive because there was a set of eligible women who could have given birth to Jesus.

77. #Mary-e: yesu-vinu janmam nalki-ull-u:  
 Mary-e: Jesus.Dat birth gave-be-u:  
 'Only Mary gave birth to Jesus'

A Categorical construction is most felicitous in this context.

78. Mary a:nu yesu-vinu janmam nalkiyathu  
 Mary be Jesus.Dat birth gave.Sg.N.  
 'It is Mary who gave birth to Jesus'

That is, although both the Categorical construction under discussion and the Contrastive Focus construction exhibit Exhaustivity effects, the effects are derived via different routes. The above set of data makes it amply clear that whereas the Focus construction explicitly asserts that the focused element is the True answer in the context of a set of alternative answers, what the predication base in Categorical constructions does is to merely identify that unique set of elements for which the presupposition encoded in the predicate holds. In other words, we have come full circle in that there is nothing peculiar about this, we are discussing a Categorical construction where the predication base identifies those and only those elements which gives the truth value True for the predicate.

The predication base is emphasised, however, this need not automatically translate into a Focus projection either. This is NOT to argue that the Aux cannot be at a Foc projection. The Auxiliary may manifest one or more cartographic projections in the articulated left periphery of the clause. The point that I wish to make is that I will not be committing myself to a position where the Auxiliary *aanu* or other Auxiliary sequences that are permissible in this position is invariably taken to represent a Foc projection.

3.2.4 *Movement to the pre-aanu position*

The discussion above showed that exhaustivity is a side effect of being a Categorical construction, which, by definition, identifies those elements that are TRUE for the presupposed predicate. We saw some discrepancies between the *aanu* construction and the contrastive focus construction. There are additional reasons to be skeptical of an analysis of movement in the *aanu* construction as driven by a Foc feature. Fanselow and Lenertová (2011, p.178) note that idioms bear interpretation only as a whole; “since the moved element in such cases is meaningless, it cannot be a topic, a focus, or be particularly salient”. Hence, the movement of parts of idioms to these positions refutes the idea that the movement is triggered by a pragmatic property of the moved item in a direct way. In the following minimal pair, I show that parts of idiom chunks can be moved to the pre-auxiliary position, thus questioning the assumption that this pre-auxiliary position triggers focus movement.

79. the:diya valli      ka:le:l      chutti  
       searched creeper    foot.Loc    caught.  
       ‘Found the item that one was searching for’
80. the:diya valli:ya      ka:le:l      chuttiyathu  
       searched creeper.be    foot.Loc    caught.Sg.N.  
       ‘It is the item that one was searching for that was found’

The meaning of the idiom is not lost in this construction, unlike the English It-Clefts where a sentence like ‘It is the bucket he kicked’ does not have the idiomatic meaning of ‘He kicked the bucket’. Even if one were to argue that ‘kick the bucket’ is an idiom that is especially resistant to such manouvers, idioms like ‘pull strings’ or ‘pull wool over ones eyes’ etc. also result in ungrammaticality if clefted<sup>18</sup>: \*"It was (Devious) strings that she pulled to get him the job". \*"It was (thick) wool that they pulled over our eyes".

Pied-piping is another diagnostic tool when faced with the question if a particular movement is induced by a focus feature (see Horvath 2007). Fanselow and Lenertová (2011) point out that in the case of Topic or Focus movement, it should be the exact topic/focus that gets displaced, as opposed to movement triggered by an edge feature of Comp (p.199). The edge feature of Comp is unspecific in nature and can trigger movement of any category. Thus, a category that is bigger than the focused element can be moved by an edge feature. Following this logic, movement to the pre-auxiliary position could be argued to be induced by an edge feature:

---

<sup>18</sup> Thanks to Peter Svenonius for the arguments from English

81. *pusthakam nii aarudeyaa<sup>19</sup> meediche<sup>20?</sup>*

Book you whose.be bought.Sg.N.

Lit: Whose is it that you bought a book?

‘Whose book did you buy?’

82. *Anandinte pusthakamaa me:diche.*

Anand’s book.be bought.Sg.N.

It is Anand’s book that (I) bought.

The larger phrase ‘Anand’s book’ is in the pre-*aanu* position here, instead of the exact answer to the question, which is what must carry the focus feature. Perhaps this is a case of pied-piping? Quoting Heck (2004) Fanselow and Lenertová argue that “pied-piping is restricted to categories that are syntactic islands for the attracted category” (p.200). The next example shows that this is not the case here, since the possessor can undergo movement to the pre-*aanu* position independently of the possessed.

83. *Anandinteyaa pusthakam me:diche.*

Anand’s.be book bought.Sg.N.

It is Anand’s book that (I) bought.

Apart from these, recall the data that shows a topical element marked by *aane:l* appearing in the pre-*aanu* position (example 8 reproduced here):

Context: we need to gain entry to the club, but we are not members. So we plan to bribe the bouncer and are discussing the different bouncers the club usually employs.

84. *Meera aane:l kuzhappam illa;*

Meera be.if problem be<sub>Neg</sub>;

As for Meera, it is no problem;

*Aniyan aane:laa nammal kudungunnathu.*

Aniyan be.if.be we trappedSg.N.

Lit: It is as for Aniyan that we are going to be trapped.

‘As for Aniyan, we will be trapped’.

I will not go into a detailed analysis on this here; my primary concern being the behaviour of

<sup>19</sup> The example is given in the contracted spoken form where the auxiliary *aanu* is contracted to *aa* and appears affixed to the pre-auxiliary element; the Sg.N. ending on the verb *athu* is contracted to *e*. We will see this in many examples in the rest of the thesis.

<sup>20</sup> The intervening subject shows that this is not a case of internal topicalisation within the DP ‘Whose book’ followed by the entire DP moving to the pre-*aanu* position.

a Wh. I just want to reiterate the point I made in the previous section that it is not prudent to assume *a priori* that the *aanu* construction involves a Focus head that triggers Focus movement and to extrapolate that assumption to Wh. The behaviour of Wh in the *aanu* construction will be explicitly dealt with later in the thesis.

### 3.2.5 *Auxiliaries, Modals and Bipartite Information Structure*

This section shows that Categorical constructions are, in fact, not restricted to the [XP *a:nu* ... *Vathu*] strings that we discussed so far. A categorical reading can be created in many other cases, too, for example with Modals. Thus, unless one adopts a view point that every time a Modal or an Auxiliary shows up in a sentence, they are indicators of a different clause, the simplest assumption would be that the clausal spine (or the extended projection of the verb *a la* Grimshaw 2000, see also Brokehuis 2013) is spelled out in these constructions by two (or more as the case may be) verbal elements<sup>21</sup>.

People arguing for a biclausal structure might be tempted to point to data where the Auxiliary appears to be suffixed with temporal information like the following:

85. *avan aayirunnu*<sup>22,23</sup> *vannathu*  
 he *be<sub>3</sub>.Past-be<sub>2</sub>.Past* *came.Sg.N.*  
 It was he who had come.

<sup>21</sup> Also worth mentioning is the observed fact that the C-head in all these contexts tends to appear in a head-initial position.

<sup>22</sup> The Auxiliaries will be glossed as follows:

*aanu* : *be* *ul-* : *be<sub>1</sub>* *ir-* : *be<sub>2</sub>* *aak-* : *be<sub>3</sub>*

<sup>23</sup> I have not explored whether *a:yirunnu* is

*aa-irunnu* or *aayi-irunnu*  
*be-be<sub>2</sub>.Past* *be<sub>3</sub>.Past -be<sub>2</sub>.Past*

Both of these could give *aayirunnu*.

However, my dialect shows a clear difference between the two.

John-aa *raajavu*

John-be *king*.

John is King

Past:

*annu* John-aa-runnu *mantri*

that day John-be- *be<sub>2</sub>.Past* *minister*

John was the minister then

The form of ‘be’ is different in context of a transient, become-like use:

John *orikkal* *mantri* *aayaa-runnu*

John once *minister* *become.be*

John once became a minister

This distinction is not in any way crucial to the points made in the dissertation. Hence I refrain from teasing apart the nuances and simply gloss *aayirunnu* as ‘*be<sub>3</sub>.Past -be<sub>2</sub>.Past*’.

It should be noted that Malayalam may use a number of auxiliaries in various combinations to express fine distinctions related to temporality of events in addition to modality as a sentence like the following shows:

86. *avan avide und-aay-irikk-anam-aay-irunnu*  
 he there *be<sub>1</sub>-be<sub>3</sub>.Past-be<sub>2</sub>-must- be<sub>3</sub>.Past -be<sub>2</sub>.Past*

If only he were there.

Such a construction is not amenable to be predicatised.

87. \**avide a:nu avan und-a:y-irikk-anam-a:y-irunnathu*  
 there be he *be<sub>1</sub>-be<sub>3</sub>.Past-be<sub>2</sub>-must- be<sub>3</sub>.Past -be<sub>2</sub>.Past.Sg.N*

It was there where he should have been.

The reading is conveyed by predicatising at the deontic Modal as in the following example:

88. *avide a:y-irunnu avan und-a:y-irikk.andathu*  
 there *be<sub>3</sub>.Past-be<sub>2</sub>.Past* he *be<sub>1</sub>-be-be<sub>2</sub>-must.Sg.N*.

It was there that he should have been.

In fact, this strategy of creating a bipartite structure to emphasize a selected constituent by splitting the verb morphology into verb+auxiliary is not restricted to the constructions discussed above alone. We see the same strategy employed, to cite an example, in Modal constructions. Deontic Modals are usually able to take infinitival complements. In Malayalam, there are two ways a deontic modality can be expressed – (i) via an inflected verb or (ii) via Auxiliary taking an infinitive as complement. When the Modality is expressed through verbal morphology, it is akin to a Verb-final expression in that the entire proposition falls into focus. However, when the modality is expressed through a bipartite Auxiliary + Infinitive structure, the element that immediately precedes the Auxiliary is emphasized.

89. *Rajan Priyaye ka:nanam*  
*Rajan Priya.Acc see.Mood*  
 Rajan must see Priya.

90. *Rajan ve:nam Priyaye ka:na:n*  
*Rajan must Priya.Acc see<sub>infinite</sub>*

It is Rajan who must see Priya.

To use terminology that is consistent with the discussion so far, example 90 involves a predicate and a predication base marked out using a Modal. Furthermore, 90 is interpretatively equivalent to 91 where the bipartite structure is attained using *a:nu* so much so that they can be felicitously used interchangeably.

91. Rajan a:nu Priyaye ka:nandathu  
Rajan be Priya.Acc see.Mood.Sg.N.  
It is Rajan who must see Priya.

The similarity does not end here. Like any categorical construction, the bipartite structure in 90 is amenable to having any other semantically compatible element being emphasized.

92. Priyaye ve:nam Rajan ka:na:n  
Priya.Acc must Rajan to see  
It is Priya who Rajan must see.

93. Priyaye a:nu Rajan ka:nandathu  
Priya.Acc be Rajan see.Mood.Sg.N.  
It is Priya who Rajan must see.

94. naale ve:nam Priyaye Rajan ka:na:n  
tomorrow must Priya.Acc Rajan to see  
It is tomorrow that Rajan must see Priya.

95. naale a:nu Priyaye Rajan ka:nandathu  
tomorrow be Priya.Acc Rajan see.Mood.Sg.N.  
It is tomorrow that Rajan must see Priya.

Thus, the temporal morphology only goes to substantiate the claim that *a:nu* and the verb forms a single functional sequence assuming that one does not take examples 86, 88, 90 etc. to argue for as many clauses as there are auxiliaries.

### Copula or Auxiliary

In the light of these examples, we can take a second look at example 85, reproduced below:

96. avan a:yirunnu vannathu  
he be<sub>3</sub>.Past-be<sub>2</sub>.Past came.Sg.N.  
It was he who had came.

This has the interpretation of past perfect. Past Perfect in Verb-final would be expressed as follows:



97. *avan vann-a:yirunnu*  
he came- be<sub>3</sub>.Past-be<sub>2</sub>.Past  
He had come

The following sentence where one attempts to predicatise the verb+*a:yirunnu* is ungrammatical:

98. \**avan a:nu vann-a:yirunnathu*  
he be came- be<sub>3</sub>.Past-be<sub>2</sub>.Past  
It is he who had come.

However, predicatising at the level of the inflected verb is grammatical and gives exactly the construction that could be pointed out as a counterargument:

99. *avan a:yirunnu vannathu*  
he be<sub>3</sub>.Past-be<sub>2</sub>.Past came.Sg.N.  
It was he who had come.

This point can be further substantiated by the fact that the so-called temporal morphology on the *aanu* is restricted by the verb. For example, the copular use of *a:nu* has the future form *a:kum*. This is incompatible with a verb in its Auxiliary usages. Instead, the a combination of two auxiliaries *a:yirikkum* is used as shown below.

100. *avan vann-a:yirikkum*  
he came- be<sub>3</sub>.Past-be<sub>2</sub>.Fut  
'He may have come'

101. \**avan vann-a:kum*  
he come-be<sub>2</sub>.Fut  
'He may have come'

This pattern is reproduced in the categorical constructions.

102. *avan a:yirikkum vannathu*  
he be<sub>3</sub>.Past-be<sub>2</sub>.Fut came.Sg.N.  
'It might be he who came.'

103. \**avan a:kum vannathu*  
he be<sub>3</sub>.Fut came.Sg.N.  
'It may be he who came.'

If *a:nu* is functions here as a copula that can take temporal morphology independently, it is inexplicable why 103 is ungrammatical.

The verb and the Auxiliaries form a single functional sequence with no specifically marked predication base. It appears that a certain portion of this functional sequence can be modified into a predicate and the Auxiliaries can, then, mark the predication base, with *a:nu* being the default option when no Auxiliaries are present.

### 3.3 Clause Structure

#### 3.3.1 *Monoclausal or Biclausal?*

This section looks closely at the global structure of the Categorical construction and addresses the debate whether it is a monoclausal or biclausal construction. Categorical constructions were sometimes argued to be Clefts and this has led to the assumption and/or argument that they are necessarily biclausal.

Jayaseelan (2001) and Madhavan (1987) have argued that this is a cleft construction and has a biclausal structure. According to Jayaseelan (2001) (Jayaseelan hereafter in this section), the construction involves a CP, which functions as an argument to *aanu*, which functions as a copula in these constructions. We begin with taking a closer look at Jayaseelan (2001) and pointing out some of the problems with that proposal alongwith general arguments against a biclausal proposal. From there we move on to constructions that involve modals. The sentences where the verb spells out the modal morphology behaves like Verb-final constructions whereas constructions with [a separate modal + infinitive form of the verb] can yield a bipartite Categorical reading, just like the [XP *aanu* ... V.athu] sentences showing a wider range of Categorical constructions, and underlining the monoclausal nature of it. The temporal interactions between the Auxiliary and the verb is explored followed by evidence in support of labelling *aanu* as the Auxiliary.

#### Jayaseelan (2001)

Jayaseelan's analysis is contingent on his proposal for a left periphery of vP with Topic and Focus positions between the IP and vP in thethetic construction. He extends the argument for this clause medial focus position to include the categorical construction. This is done by proposing that *aanu* is a copula that takes a CP as its complement. Consequently, *aanu* instantiates a clause medial Focus position. He argues that "The Malayalam copula, like other verbs, does not raise to I. We suggested that it adjoins to Focus, when Focus is

present. Malayalam being a pro-drop language, the subject position can be filled by an expletive pro.” (p.63). The schematic representation is given below in figure 1.

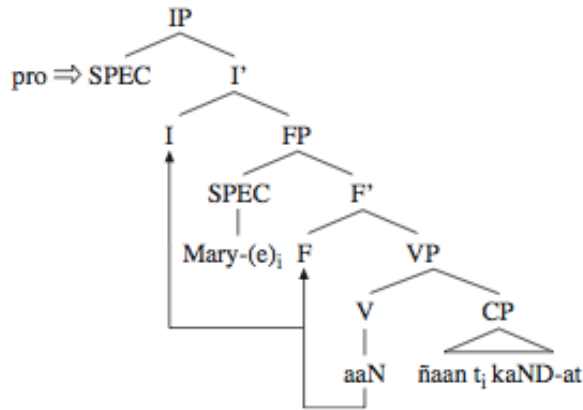


Fig:1

There are a number of reasons to Deviate from this proposal. To begin with, the *aanu* construction encodes Exhaustivity. However, the preverbal position in thetic constructions does not give rise to such a reading at all. For example, take the following pair of sentences in 104 and 105. According to Jayaseelan’s proposal, the co-ordinated elements would be occupying the vP-peripheral Focus position.

- |      |                              |            |             |       |
|------|------------------------------|------------|-------------|-------|
| 104. | Priyaye                      | Rajanum    | Aniyanum    | kandu |
|      | Priya.Acc                    | Rajan.Conj | Aniyan.Conj | saw   |
|      | ‘Rajan and Aniyan saw Priya’ |            |             |       |
| 105. | Priyaye                      | Rajan      | kandu       |       |
|      | Priya.Acc                    | Rajan      | saw         |       |
|      | ‘Rajan saw Priya’            |            |             |       |

(105) straightforwardly follows from (104), showing that this preverbal Focus position does not have any Exhaustive reading. If the structure of the categorical construction is made up of a copula instantiating the same preverbal focus position in a thetic sentence, then the fact that the *aanu* construction alone encodes Exhaustivity remains unexplained.

In addition to the drawback that the above data are unexplained in a Jayaseelan’s analysis, the proposal also makes a prediction that if there are indeed two full CPs in the categorical construction, then it should be possible to have a grammatical sentence with two sentence level adverbs. However, this is not borne out:

- |      |   |           |         |                 |                                   |           |           |
|------|---|-----------|---------|-----------------|-----------------------------------|-----------|-----------|
| 106. | *oru  | pkashe    | Priyaye | aanu            | [ <sub>CP</sub> ullathu paranjaal | Rajan     | kandathu] |
|      | probably                                      | Priya.Acc | be      | franklyspeaking | Rajan                             | saw.Sg.N. |           |
|      | ‘Probably it is Priya that frankly Rajan saw’ |           |         |                 |                                   |           |           |

Both the adverbs are fine at the left periphery of an *aanu* construction.

107. oru pkashe Priyaye    *aanu*        Rajan kandathu  
       probably Priya.Acc be            Rajan saw.Sg.N.  
       ‘Probably it is Priya that Rajan saw’
108. ullathu paranjaal Priyaye    *aanu*    Rajan kandathu  
       frankly speaking Priya.Acc be        Rajan saw.Sg.N.  
       ‘Frankly, it is Priya that Rajan saw’

Another piece of data that is in line with a monoclausal analysis comes from the behavior of the Long Distant Anaphor (LDA) *taan* in Malayalam. *Taan* is obligatorily a LDA as can be seen from the examples below:

109. \*mantri    tanne        kandu  
       minister    LDA.Acc saw
110. [mantri    tanne        kandu ennu]        ra:ja:vu    paranju  
       minister    LDA.Acc saw    comp        king        said  
       ‘The king<sub>i</sub> said that the minister saw him<sub>i</sub>’

That is, the LDA needs two clauses to make meaningful a reference. It is telling that the behavior of an LDA in a simple categorical sentence is exactly parallel to the verb-final constructions in 109-110 above.

111. \*mantri    a:nu    tanne        kandathu  
       minister    be        LDA.Acc saw.Sg.N.  
       ‘It is the minister who saw LDA’.

Just like the verb-final sentence, embedding makes the LDA grammatical.

112. [mantri    tanne        kandu ennu]        ra:ja:vu    a:nu    paranjathu  
       minister    LDA.Acc saw    comp        king        be        said.Sg.N.  
       ‘It is the king<sub>i</sub> who said that the minister saw him<sub>i</sub>’

In addition, it may be noted that *taan* is functional in monoclausal sentences if it is inside a bigger DP, in this case, a possessive and yields a reflexive meaning.

113. mantri        tante    bharyaye    kandu  
       minister        self’s    wife.Acc        saw  
       ‘The minister<sub>i</sub> saw his<sub>i</sub> wife’.

This being the case, if the analysis of Categoricals as biclausal constructions involving a CP, one would predict that the LDA would yield a reflexive interpretation at the very least in a Categorical sentence. As the following example shows, this is not the case.

114. \*mantri a:nu [tanne kandathu]  
 minister be LDA.Acc saw.Sg.N.  
 ‘The minister saw himself’

### 3.3.2 *Position of the Verb*

We saw in the last chapter that there are sufficient reasons to believe that the thetic constructions involve V-to-C movement. What happens in an *aanu* construction? For starters, there is a verb and an Auxiliary in this monoclausal construction. Where are these elements placed? It will be shown that the verb remains lower than *a:nu* in these constructions.

We start with Negative Polarity Items (NPI) – NPIs cannot be licensed if they appear above the negation; the example below shows the Negation on the verb fails to asymmetrically c-command the NPI indicating that the verb is below *aanu*.

115. \*a:rum a:nu [innale vara:thathu]  
 nobody be yesterday come.Neg.SgN  
 ‘It is no one who came yesterday’

116. innale a:nu [a:rum vara:thathu]  
 yesterday be nobody come.Neg.SgN  
 ‘It is yesterday that nobody came.’

Note that that the predicate part in an *aanu* construction can be coordinated:

117. Aniyane kandathum Anupine vilichathum Rajan a:nu  
 Aniyane.Acc saw.Sg.N..Conj Anupine.Acc called.Sg.N..Conj Rajan be  
 ‘It is Rajan who saw Aniyane and called Anup.’

This suggests that the verb may not rise up to Fin since finite clauses in Dravidian resists coordination.

However, the verb must be leaving at least the Asp Phrase as the inability to make a predicate out of it reveals. The root form of the verb and aspectual forms do not lend themselves to function as predicates in *aanu* construction.

118. \*avan a:nu varathu  
       he be come<sub>root</sub>.Sg.N.

119. \*avan a:nu var-a:rathu  
       he be come-habitual.Sg.N.

120. avan a:nu vannathu  
       he be came.Sg.N  
       He is who came.

If the verb indeed stays low, then it is not easily explained as to why AspP cannot function as the predicate. Data suggests that verb can rise up to deontic Mood in categoricals.

121. avan a:nu vara-ndathu  
       he be come-must.Sg.N.  
       He is who must come.

However, Epistemic Mood does not seem to be amenable to this.

122. Rajan Priyaye kanda:yirukkum  
       Rajan Priya.acc saw.epistemic possibility  
       Rajan may have seen Priya.

123. \*Rajan a:nu Priyaye kanda:yirukkunnathu  
       Rajan be Priya.acc saw.epistemic possibility.Sg.N.  
       Rajan may have seen Priya.

Instead, the Auxiliaries above the inflected verb act as the marker of the predication base.

124. Rajan a:yirikkum Priyaye kandathu  
       Rajan be<sub>3</sub>.Past-be<sub>2</sub>.possibility Priya.acc saw.Sg.N.  
       It may be Rajan who has seen Priya.

Assuming that deontic Mood is in the IP level and epistemic Mood is in the CP level (Cinque 1999), this suggests that the verb rises to IP in categorical constructions, continuing to subscribe to head-movement. As evidenced by examples 109 and 110 above, it is impossible to produce an *aanu* construction at phrases below the IP level<sup>24</sup>. Thus it can be safely concluded that the verb is within the IP in categorical constructions.

This phenomenon is not restricted to *aanu* construction; certain modals also allow for such behavior. An example that involves the Modal *ve:nam* is given below. Either the verb can

---

<sup>24</sup> This data is relevant also for the argument that in Verb-final sentences the verb is in C, but in Categorical sentences the verbs moves only up to TP, the uninterpretable phi features of C being inherited by T and valued by the Sg.N. morpheme *athu*, dovetailing with proposals like Alexiadou and Angnostopoulou (1998) synchronically and Simpson and Wu (1999, 2002) diachronically.

rise to C and appear in the inflected form or rise only up to IP and appear in the infinite form with the modal auxiliary *ve:nam* above the verb, creating a bipartite emphatic structure.

125. Rajan      Priyaye      ka:nanam  
       Rajan      Priya.Acc see.Mood  
       ‘Rajan must see Priya.’
126. Rajan *ve:nam*      Priyaye      ka:na:n  
       Rajan must      Priya.Acc to see  
       ‘It is Rajan who must see Priya.’

Further more, as we saw in examples 100-103, the Auxiliary that can mark the predication base is dependent on its compatibility with the respective inflected verb. Generalizing, we get the following pattern of creating a Categorical construction:

- In the presence of an Auxiliary sequence that appear with the inflected verb to express various Modalities, the Auxiliary sequence is employed to mark the predication base.
- In the absence of such Auxiliaries, *a:nu* is used to mark the predication base.

This is further substantiated by the interaction between the temporal encoding on the verb and the auxiliaries in that it is ungrammatical to have the auxiliary sequence indicating [+past] and the verb indicating [-past] in a Categorical construction, just as it is ungrammatical in an indisputably monoclausal Verb-final construction.

127. Priya      urangi  
       Priya      slept  
       ‘Priya slept’
128. Priya      a:nu      urangiyathu  
       Priya      be      slept.Sg.N.  
       ‘Priya is the one who slept’
129. Priya      urangunnu  
       Priya      sleep  
       ‘Priya sleeps/is sleeping’
130. Priya      a:nu      urangunnathu  
       Priya      be      sleep.Sg.N.  
       ‘Priya is the one who sleep/is sleeping’

In these minimal pairs, the Verb-final sentence is without any Auxiliary. Thus, the default minimally marked Auxiliary *aanu* is used to mark the predication base. On the other hand,

when the verb takes an Auxiliary sequence, it is that specific Auxiliary sequence that acts as the Predication Base.

131. Priya      urangi-a:runnu  
         Priya      slept-be<sub>3</sub>.Past-be<sub>2</sub>.Past  
         ‘Priya had slept’

132. Priya      a:runnu                      urangiyathu  
         Priya      be<sub>3</sub>.Past-be<sub>2</sub>.Past      slept.Sg.N.  
         ‘Priya was the one who slept’

Auxiliary complex that may contradict the temporal information on the verb makes the sentence ungrammatical in a Verb-final construction as shown in the following example:

133. \*Priya      urangunn-a:runnu  
         Priya      sleep-be<sub>3</sub>.Past-be<sub>2</sub>.Past

This is transferred straightforwardly into the corresponding categorical construction as well making the relation between the verb and the Auxiliary sequence that marks the predication base clear.

134. \*Priya      a:runnu                      urangunnathu<sup>25</sup>  
         Priya      be<sub>3</sub>.Past-be<sub>2</sub>.Past      sleep.Sg.N.

We will be exploring only those categorical constructions with *a:nu* in the rest of this thesis.

### 3.3.3 *Position of the Auxiliary: Evidence from A-bar movement.*

If the predicate is an IP with the verb in it, then what is the position of *a:nu* in these constructions? Here we explore movement of elements to the pre *aanu* position in an attempt to see the kind elements it can host.

135. Rajan      innale Priyaye      vi:ttil vechu      kandu  
         Rajan      yesterday Priya.acc      home.Loc at      saw  
         Rajan saw Priya yesterday at home.

Any of the elements in the above sentence can be hosted by *aanu*, including the PP and the adverb, showing that this constitutes A-bar movement, and hence, *aanu* must be at the C-

---

<sup>25</sup> The reading we are talking about here is only [-past]. A habitual reading as in the following example is compatible with [+past] at the CP level.

Priya    a:runnu      eppo:zhum      urangunnathu.  
 Priya    be.be        always        sleep.Sg.N.  
 It was Priya who used to sleep.



domain. Moreover, *aanu* can appear above the temporal adverb ‘yesterday’, providing further evidence to its being a C-head.

136. Rajan a:nu innale Priyaye kandathu  
 Rajan be yesterday Priya.acc saw.Sg.N.  
 ‘It is Rajan who saw Priya yesterday.’
137. Priyay a:nu innale Rajan kandathu  
 Priya.acc be yesterday Rajan saw.Sg.N.  
 ‘It is Priya who Rajan saw yesterday.’
138. innale a:nu Rajan Priyaye kandathu  
 Rajan be Rajan Priya.acc saw.Sg.N.  
 ‘It is yesterday that Rajan saw Priya.’
139. Vi:ttil vechu a:nu Rajan Priyaye kandathu  
 Home.Loc at be Rajan Priya.acc saw.Sg.N.  
 ‘It is at home that Rajan saw Priya.’

It should be mentioned that all elements hosted at this position need not necessarily be dislocated. For example, there is no reason why reason clauses should be prohibited from being base generated at this position in the following example:

140. [manthri nirbandhiccathu kondu] a:nu police avane arrest cheythathu.  
 minister force.Sg.N with be cpolice he.Acc arrest did.Sg.N  
 ‘It is because the minister forced (them) that the police arrested him.’

Earlier we saw that elements that are overtly marked as Topic also can occur at the pre-*aanu* position. This should not be possible if *aanu* is not a C-head. Therefore, *aanu* will be treated as occupying C in this thesis.

### 3.3.4 Structure

A categorical construction involves a Predicate (that contains the Verb), a Predication Base (the phrase that the predicate is about), and an Auxiliary that marks the Predication Base. We saw that the verb is in the IP and the Auxiliary is at the C-level. That leaves only the Predication Base.

One of the facts relevant here is that the predication base obligatorily occupies the position immediately before the Auxiliary or Auxiliary sequence. In all of the examples we discussed so far, the Predication Base is the phrase immediately before the Auxiliary. On the other hand, once the bipartite structure is created by the Auxiliary- V-to-I combination, it is

obligatory that an overt phrase occupy the immediately pre Auxiliary position; otherwise, the sentence becomes ungrammatical as shown in the following example:

141. \* $\emptyset$  *aanu* Priyaye kandathu  
 be Priya.Acc saw.Sg.N.

This points in the direction that the Predication Base and the Auxiliary are in a Spec-Head relation.

Arguments originating inside the vP moves to the predication base, they are not base generated at the position. This is evident from the verbs that assign dative case to their arguments. Categorical constructions retain these cases, evidencing that the element that functions as the predication base moves there from within the vP.

142. Rajanu visannu.  
 Rajan.Dat hunger.Past  
 ‘Rajan became hungry’.
143. Rajanu a:nu visannathu  
 Rajan.Dat be hungered.Sg.N.  
 ‘It is Rajan who became hungry’.

However, as shown in the discussion about the position of *aanu*, C-level adjuncts may be merged as the predication base directly. We will not explore this in detail as we are focusing on the relation between the predication base and the Auxiliary.

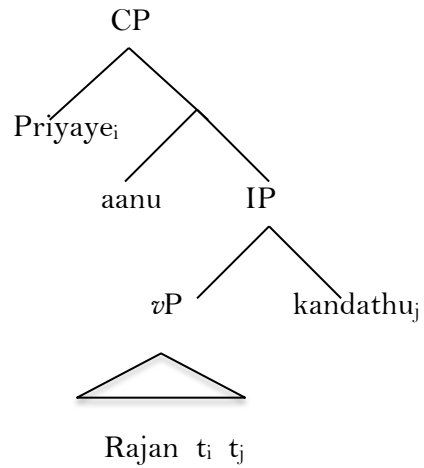
Abstracting away, the following structure is adopted for categorical constructions. The auxiliary is in the C domain and the verb is in the I-domain. The verb is shown in the following diagrams as positioned at I, assuming head movement. However, the exact position of the verb inside the IP does not affect the analysis of Wh that I would be arguing for. The crucial fact that matters for the analysis is that the verb is lower than C, within the IP, with *aanu* at C in the construction.

144. [<sub>CP</sub> Predication Base [<sub>C</sub> Auxiliary [<sub>IP</sub> V<sub>i</sub>.athu [<sub>vP</sub> ... t<sub>i</sub> ]]]]

To exemplify, a sentence like (145) is proposed to have the syntactic representation in (146).

145. Priyaye *aanu* Rajan kandathu  
 Priya.Acc be Rajan saw.Sg.N.  
 ‘It is Priya who Rajan saw’

146.



### 3.4 Summary

The Categorical constructions were explored in some detail in this chapter. Categoricals are exhaustive by presupposition. It was shown that the verb in these constructions is inside the IP domain. An auxiliary carries the temporal and finiteness information encoded in the C level. The predication base appears at the specifier position of this auxiliary with the following abstract representation:

$$[_{CP} \text{ Predication Base } [_{C} \text{ Auxiliary } [_{IP} V_i.\text{athu } [_{vP} \dots t_i ]]]].$$

## Chapter 4

### Wh in Malayalam – Morphology

This chapter aims to provide a morphological break down of the Wh word in Malayalam. First, the place of a Wh word in the pronominal paradigm is shown. The paradigm makes it imperative that the pronominal system be understood for an in-depth understanding of the Wh. Hence, a somewhat detailed analysis of the third person pronouns are given in section 4.2. It is shown in section 4.4 that the pronominals in Malayalam are pro-DPs *a la* Dechaine and Wilchko (2002). The deictic part in the pronoun is the D part of the DP and makes it inherently referential, as argued in section 4.5. It is this part that is altered in making a Wh word. Thus, a Wh word is made by changing the part that gives the DP definite reference into one which leaves it open. Section 4.6 deals with this issue and the next section follows it up with the question whether an open expression means a pure variable. Applying the diagnostics employed by Cole and Hermon (1998), it is argued that Malayalam Wh is not a variable similar to the Chinese Wh words.

#### 4.1 Wh and the Pronominal Paradigm

Malayalam is generally described as an Agglutinating language. This makes a lot of the morphological features overtly visible and concrete. Consequently, Malayalam Wh words tend to wear explicit morphology on their sleeves to distinguish themselves. Some examples are given below:

e-nthu	What				
e-:thu	Which	a-thu	that	i-thu	this
e-vidē	Where	a-vidē	there	i-vidē	here
e-ngane	How	a-ngane	thus	i-ngane	thus
e-ppo:l	When	a-ppo:l	then	i-ppo:l	now
e-nnu	Which day	a-nnu	that day	i-nnu	today
e-thra	how much	a-thra	that much	i-thra	this much

As can be seen from the examples here, the morpheme /e-/ appears with all of these Wh words consistently. In fact, the only exception seems to be the word for ‘who’. ‘Who’ in Malayalam is *a:ru* which is not marked for gender and the number encoded is Singular.

However, the /e-/ morpheme is part of **all** other Wh words and seems to somehow embody the interrogate-ability of the Wh word. Malayalam uses a distinction between proximal versus distant when it comes to the pronominal system. /a-/ is the marker for distant and /i-/ is the marker for proximal

Interrogative words in Malayalam exhibit a very productive paradigmatic relation with the pronominal system in general. As shown in the table, the morphological boundaries are impressively consistent and explicit. The Wh pronouns are part of a larger paradigm together with other pronominals in many languages and this, in turn, leads us to explore the paradigm.

## 4.2 GoPro – Pronominals and Binding

What is generally referred to as ‘Pronouns’ in mainstream literature in Malayalam are given in the third and fifth columns in the above table. They are, as mentioned, all marked with ‘deictic features’ (Ducceschi 2012). They follow the general abstract morphology of |deictic feature + place/time/phi/...|. Though they are generally given as examples of pronouns (eg. Asher and Kumari 1997), they differ from typical English type pronouns in many respects.

I begin below with an illustration of the consistent pattern that the third person pronoun<sup>26</sup> in Malayalam exhibits that fall out of the canonical Binding theory principles.

Binding Theory attempts to understand the conditions under which a Name, a pronoun or a reflexive can occur. For example, the sentence ‘John saw him’ could only mean that John saw someone else other than John. However, ‘John saw himself’ cannot mean that John saw someone else. It is this type of properties that a referring expression (R-expression), pronoun or reflexive exhibit that the binding theory lays out as three Conditions – Condition C rules R-expressions, Condition B rules pronouns and Condition A, anaphors. We go into them in detail in this section and show the anomalies w.r.t. Malayalam.

### 4.2.1 Condition C

Before going into the domain specific behavior of R-expressions, it might be a good idea to plot the features of R-expressions in Malayalam in general. Malayalam R-expressions, particularly names, seem to encode different features than their more familiar counterparts

---

<sup>26</sup> Only the distal ones are used for co-reference in Dravidian languages. For a detailed description and elaborate data set, see Ducceschi 2012.

in other languages. For example, a name may be used not only to refer to a third person, but also to address someone, i.e., to refer to second person.

Condition C states that R-expressions should be free everywhere. However, similar to Thai (Lee 2003), Hmong (Mortensen 2003) Vietnamese (Narahara 1995), San Lucas Quiavini' Zapotec (Lee 2003) etc., Malayalam allows for violation of this. In (1) the language uses the same R-expression in both the argument positions, a domain that is traditionally known to allow only reflexives.

1. Sivan<sub>i</sub>      Sivanu<sub>i</sub>      vote ceythu  
    Sivan      Sivan.Dat vote did  
    'Sivan voted for himself'
2. Sivan<sub>i</sub>      Sivane<sub>i</sub>      pukazhthi  
    Sivan      Sivan.Acc praised  
    'Sivan parised himself'
3. Jo:n      Johnine-ppatti      kure ne:ram      samasaarichu  
    John      about John      for a long time      talked  
    'John talked about himself for a long time'
4. Sivane orikkal      Rajan sahaayichathaanu ennu      Sivan o:rthu  
    John once      Rajan helped-be      comp Sivan remembered  
    Sivan<sub>i</sub> remembered that Rajan had once helped him<sub>i</sub>.

Not only proper names, but other R-expression like titles such as doctor and kinship terms like father also can be used in the same way as Proper nouns.

5. vaidyar<sub>i</sub>      vaidyare<sub>i</sub>      cikitsikku  
    doctor      doctor.Accheal  
    Doctor, heal yourself.
6. achan<sub>i</sub>      [achante<sub>i</sub> kaaryam]      no:kki po:kum (amma ottaykaakum)  
    father father-gen affairs      look after  
    Father will look after his affairs (and mother will be left alone)

Like many other Asian languages, Malayalam also encodes social hierarchies into the pronominal system. Hence, even if a pronominal substitute is grammatically available to replace the second occurrence of the R-expression (as we will see in the next section), most people would prefer sentences like 5 and 6 where the R-expressions are used consistently.

#### 4.2.2 Condition B

Condition B imposes restriction on the domains where Pronouns can appear in that a pronoun cannot have its antecedent in its local binding domain; one generally finds an anaphor in those contexts. However, Malayalam allows for the appearance of pronouns as coreferred coarguments:

7. a:dyam ni: ninne cikitsikku  
 first you you.Acc heal  
 ‘First, you heal yourself’
8. ennittu nja:n enne cikitsikka:m  
 then I me heal-Future  
 ‘Then I will heal myself’

These are the same forms of personal pronouns that appear in non-reflexive contexts as we can see below:

9. a:dyamSivan ninne cikitsiccu  
 first Sivan you.Acc healed  
 ‘First, Sivan healed you’
10. ennittu avan enne cikitsiccu  
 then he me healed  
 ‘Then he healed me’

The same holds for third person pronoun as well:

11. Who did he see in the mirror?
12. avan avan-e kandu!  
 he him saw  
 ‘He saw himself’

With an R-expression or epithet as the antecedent, the use of a pronoun shows greater acceptability if the pronoun is marked in some way<sup>27</sup>. Thus, the unmarked 14 is degraded

---

<sup>27</sup> A similar pattern is reported for Japanese in Nakao (2004)

- a. \*?Taro-wa Taro-o tatai-ta.  
 Taro-Top Taro.Acc hit-past  
 ‘Taro hit Taro.’
- b. Taro-wa TARO-O tatai-ta.  
 ‘Taro hit TARO (and not anyone else).’

In (a), the object Taro is bound by the subject Taro. Although (a) is not completely ungrammatical, it is highly awkward unless the second occurrence of the R-expression has a contrastive focus, which is indicated by capitalization, as in (b).

compared to 15 where the pronoun is stressed, or morphologically marked in some way as in 16 and 17.

13. Who will John see in the mirror?

14. John<sub>i</sub> avan-e\*<sub>i/k</sub> ka:num!  
 he him see-future  
 ‘John will see him/himself’

15. John<sub>i</sub> **avan-e**<sub>i/k</sub> ka:num!  
 he him see-future  
 ‘John will see him/himself’

The acceptability increases with the presence of overt contrastive focus morphology.

16. John<sub>i</sub> avan-e-ye: <sub>i/k</sub> ka:n-u!  
 he him-focus see-focus  
 ‘John will see only him/himself’

17. John<sub>i</sub> avane<sub>i/k</sub> ma:thram ka:num!  
 he him only see-future  
 ‘John will see only him/himself’

And the sentences below in 18 and 19 are quite grammatical and natural.

18. John<sub>i</sub> avane<sub>i/k</sub> ma:thrame: ka:nuka ullu!  
 John him only-foc see be-foc  
 ‘John will see only him/himself’

19. a: thendi<sub>i</sub> avane<sub>i/k</sub> ma:thrame: ka:nuka ullu!  
 that bugger him only-foc see be-foc  
 ‘That bugger will see only him/himself’

The emphatic marker *tanne* also makes the sentences natural.

20. John<sub>i</sub> avane<sub>i/j</sub> tanne ka:num!  
 he him emph see-future  
 ‘John will see only him/himself’

Now, *tanne* needs special mention among the other markers shown above since this element has sometimes been dubbed as a reflexivising element (Jayaseelan 1989). Before going on to *tanne*, notice that none of these strategies is able to force obligatory binding. When we have a real reflexive, like in the English sentence ‘John saw himself’, the reflexive makes coreference between the two NPs obligatory and coreference with any other NP results in ungrammaticality. This does not happen in any of the examples we discussed here. The emphatic marker or focus just makes it more conducive for a coreference reading between the relevant NPs, but the coreference is not obligatory.



### 4.2.3 Condition A and the emphatic marker *tanne*

Condition A is about the contexts where pronouns and R-expressions cannot appear. Only Anaphors can occur in these contexts. Worded differently, anaphors force obligatory coreference with another NP, and bars coreference with any other NPs. However, as shown above, Malayalam allows both pronouns and R-expressions in domains where they are barred in languages like English. The language does not have dedicated local anaphors. The emphatic marker *tanne* is what one would find if a Malayalam speaker were to translate an English sentence with a reflexive.

21. Sivan kanna:diyil avane-tanne kandu  
 Sivan in the mirror him-tanne saw  
 Sivan saw himself in the mirror
22. Devi kanna:diyil avale-tanne kandu  
 Devi in the mirror her-tanne saw  
 Devi saw herself in the mirror
23. Sivanum Deviyum kanna:diyil avare-tanne kandu  
 Sivan and Devi in the mirror them-tanne saw  
 Sivan and Devi saw themselves in the mirror

Again, as we saw earlier, *tanne* is one of the many contexts where a pronoun coreferring with an R-expression in the same local domain sounds natural. Apart from that, there are a number of reasons to think that *tanne* does not force obligatory coreference in any way, and hence cannot be treated as a reflexiviser which makes coreference obligatory. All that *tanne* does is, like Focus in the examples we saw earlier, is to make a coreferring reading possible. Some of the most striking examples in favour of not considering *tanne* as a reflexiviser are given here.

We already noted in the last subsection that *tanne* does not make coreference obligatory, like a normal reflexive. Also, unlike familiar reflexives, N-*tanne* can appear in the subject position. In fact, N-*tanne* can appear as the only argument. i.e., without an antecedent:

24. avan-tanne avane kandu  
 he-tanne him saw  
 'He saw himself'
25. oduvil avan-tanne vannu  
 Finally he-tanne came  
 'Finally, he himself came'.

It is not even necessary that N-*tanne* has to be mandatorily bound by the subject when it appears in the object position. The sentence below simply emphasizes that ‘it was indeed he himself that the queen saw in the mirror’.

26. ra:ni kanna:diyil avane-tanne kandu  
 queen in the mirror he-tanne saw  
 ‘The queen saw he himself in the mirror’.

The NP that is associated with *tanne* can optionally corefer to any appropriate NP in the sentence regardless of whether the antecedent c-commands it.

27. me:riyude amma kanna:diyil avale-tanne kandu  
 mary’s mother in the mirror herself saw  
 Mary<sub>i</sub>’s mother<sub>j</sub> saw herself<sub>i/j/k</sub> in the mirror.

Unlike more familiar reflexives, *tanne* can go with any NP regardless of argumenthood.

28. Sivan-tanne Sivane kandu  
 Sivan-tanne Sivan.Acc saw  
 ‘Sivan saw himself’

These examples show that *tanne* can perform as an emphatic marker. But how can we rule out an analysis where the emphatic *tanne* might be homophonous with a possible reflexive marker *tanne*? In other words, examples 21-23 are actually instances of a pronominal transformed into a reflexive by *tanne* whereas the rest of the examples shows contexts where *tanne* functions as an emphatic marker?

The answer is indeed pretty straightforward. If the example in (21) is a reflexive, it means that it is a bound form and it had better behave like one. Unfortunately, it doesn’t. The pronominal form that *tanne* attached to continue to have its pronominal behavior which can be brought to light through contexts of ellipsis where the NP-*tanne* receives only the strict reading:

29. Mary avale-tanne kandu; Meerayum  
 Mary her-tanne saw Meera.Conj  
 ‘Mary saw her/herself in the mirror, and Meera too’ (saw whoever Mary saw, but, crucially, not Meera herself)
30. ra:ni avale-tanne kuttappeduthi; mantriyum  
 queen her-tanne blamed minister.Conj  
 ‘The queen blamed her/herself, and the minister too’.

If *tanne* could enforce binding, one would expect it to be bound in the elided context as well, giving rise to a sloppy reading. Clearly, this is not the case. Hence, it is incorrect to assume that *tanne* is any more than an emphatic marker.

Also, it can be shown that the NP suffixed with *tanne* obeys rules that pertain to it in the absence of *tanne*. For example, a pronoun in Malayalam cannot corefer with an R-expression that follows it. Thus, coreference is impossible in 31 and 32 where the pronoun, although suffixed with *tanne* precedes the R-expression. We would not expect this if *tanne* is a reflexiviser.

31. avane-tanne    Sivan kannadiyil    kandu  
       him-self        Sivan in the mirror    saw  
       ‘Sivani saw him in the mirror’
32. avan-tanne    Sivane kannadiyil    kandu  
       him-self        Sivan in the mirror    saw  
       ‘He himself saw Sivan in the mirror’

Thus, we can safely conclude that *tanne* is not a reflexiviser. The language lacks local anaphors.

#### 4.2.4 Constraints on antecedents

The data so far has shown that pronouns and R-expressions which are traditionally characterized by a requirement to be free in a defined local domain can be bound in Malayalam, like Thai, Vietnamese, Zapotec, Salish, Hmong etc. (cf. Lee 2003, Narahara 1995) when they have a definite reference<sup>28</sup>. However, the behavior of these elements vis-à-vis coreference is constrained by certain requirements on what can count as a legitimate antecedent. Lasnik (1986) attempted to describe this by proposing Referential Hierarchy Condition (RHC) that forbids a less referential element from binding a more referential one. At first sight, this seems to hold cross-linguistically, but various languages has been since shown not to follow RHC (Hmong, for example). Malayalam is no exception. For example, a name is more referential than an epithet and hence should be able to bind it. However, this is not the case, although RHC holds to certain extent in that a pronoun which is less

---

<sup>28</sup> Furthermore, it seems to imply that all R-expressions should be able to bind R-expressions, but again, this is not the case. Certain R-expressions—notably bare nouns that are not names or kinship terms—are resistant to binding. And quantified nouns may not be bound at all. This could be because bare nouns are generic in Malayalam, and thus lack a definite reference.

referential than a Name cannot bind a name. Unlike the Thai and Vietnamese examples that Lasnik (1986) talks about<sup>29</sup>, a proper noun cannot corefer with an epithet in Malayalam.

33. Sivan<sub>i</sub> a: thendikku<sub>j/\*i</sub> vote ceythu

Sivan that bugger.Dat vote did

Sivan voted for that bugger.

34. avan<sub>i</sub> Sivane\*<sub>i</sub> kuttappeduthi

he Sivan.Acc blamed

'He blamed Sivan'.

35. Sivan<sub>i</sub> a: thendiye\*<sub>i</sub> kuttappeduthi

Sivan that bugger.Acc blamed

'Sivan blamed that bugger'.

Lee (2003) has shown that in Thai and Zapotec, the coreference is determined by the Identical Antecedent Requirement which states that R-expressions and pronouns can only be bound by identical elements (p.85). This holds true for Malayalam R-expressions as well. This explains why Sivan cannot have the pronoun as its antecedent in 33 or 35. This holds true for titles, kinship terms and epithets coreferring with proper nouns.

36. avan<sub>i</sub> Sivanu<sub>j/\*i</sub> vote ceythu

he Sivan.Dat vote did

'He voted for Sivan'

37. mantri<sub>i</sub> Sivanu<sub>j/\*i</sub> vote ceythu

minister Sivan.Dat vote did

The minister voted for Sivan.

38. a: thendi<sub>i</sub> Sivanu<sub>j/\*i</sub> vote ceythu

that bugger Sivan.Acc vote did

That bugger voted for Sivan.

39. mantri<sub>i</sub> a: thendikku<sub>j/\*i</sub> vote ceythu

minister that bugger.Dat vote did

The minister voted for that bugger.

This confirms the Identical Antecedent requirement for R-expressions in the language. However, this is not true for pronouns, which can take an R-expression including an epithet that is a coargument as its antecedent as we saw in 15-19. However, as Narahara (1995) notes, referentiality alone cannot give a full picture of coreference. For example, in

---

<sup>29</sup> see Narahara (1995) for a different account of Thai and Vietnamese.

Malayalam, names can be used instead of second person pronouns while addressing someone.

40. (ennittu) Rajan Rajane ye: kandullo:  
 and then Rajan Rajan.Acc-foc see-foc  
 addressed to Rajan: ‘And then? you saw only yourself?’  
 if not directly addressed to Rajan: ‘And then? Rajan saw only himself?’

However, even when directly addressed to Rajan, the following sentence is ungrammatical with a coreference interpretation:

41. (ennittu) Rajan ninne ye: kandullo:  
 and then Rajan you.Acc-foc see-foc  
 ‘And then? Rajan saw only you?’

To summarise, Identical Antecedent Requirement and Reference Hierarchy Condition holds true for Malayalam although not unconditionally.

### 4.3 Bound Variable Readings

One of the early proposals on how to deal with the violations of binding conditions was by Lasnik (1986) who argued for parametrising Condition C. As opposed to this view, Lee (2003) argued that the bound R-expressions in Thai and Zapotec in fact do not pose a problem for Condition C. Her point was that “the semantic behavior of “bound” R-expressions and pronouns shows that they should not be treated as true referential arguments. Bound copies of R-expressions and pronouns behave semantically as bound variables.” (p.89). She substantiates her argument by showing that the locally bound copies allow only sloppy reading in VP-deletion contexts:

42. B-gwi’ih Gye’eihlly lohoh Gye’eihlly ze’cy cahgza’ Li’eb.  
 perf-look Mike at Mike likewise Felipe  
 ‘Mike looked at himself, and Felipe did too.’ (i.e., Felipe looked at himself/\*Mike)

A sloppy reading for elliptical constructions indicates the presence of a bound variable.

Taking a look at example in 43 below in this light, we see that it receives *only* the strict reading indicating that the second R-expression retains its potential for independent reference<sup>30 31</sup>. If the second R-expression were the manifestation of a truly bound copy of the

---

<sup>30</sup> Also, perhaps worth noting is that the two R-expressions can display disjoint reference as well. So in the context where C.P. John was being interviewed by John Brittas in a TV channel, the following sentence makes perfect sense with the two Johns referring to different persons:

first R-expression, the reading would have been ‘Mary voted for herself’ which is not what we get in Malayalam. The same strict reading is obtained in example (44) as well:

43. Sivan Sivanu vote ceythu; maryum  
 Sivan Sivan.Dat vote did; Mary-comj  
 ‘Sivan voted for Sivan; Mary, too’ (meaning: Mary voted for Sivan)
44. Priya Priyaye kuttappeduthi; Rajanum  
 Priya Priya.Acc blamed Rajan.Conj  
 ‘Priya blamed herself; and Rajan too’ (i.e., Rajan blamed Priya)

Thus, in Malayalam, the second R-expression does not behave like a bound variable. What about quantified NPs?

Lee (2003) observes that quantified NPs and bare nominals resist bound readings. She argues that this supports the bound variable status of bound copies.

45. \*B-guhty cho’nn ra bxuuhahz cho’nn ra bxuuhahz  
 perf-kill three pl priest three pl priest  
 ‘Three priests killed themselves’.

I do not know if the sentence itself is ungrammatical or if a reading that makes reference to the individual members of the group referred to by the quantified NP is unavailable. This distinction might be important. In Malayalam, for example, a bare singular nominal like the one in the following sentence can be used generically.

46. kuthira budhiyulla ji:vi a:nu  
 horse intelligence have-relativiser creature be  
 ‘Horses are intelligent animals’

As expected, not all bare singular nominals are interpreted generically:

47. a:san kalariyil undu  
 Master school-loc be  
 ‘The Master is in the school’

---

John Johnine interview cheyyunnu!  
 John John.Acc interview does  
 John interviews John!

<sup>31</sup> However, once we believe that the R-expressions in the above relevant examples retain their potential for independent reference, the Identical Antecedent Requirement demands an explanation. For, if ‘Rajan’ and the epithet ‘that bugger’ refer to the same individual, then why can’t they be referring to the same person in the following example?

Rajan<sub>i</sub> a: thendi<sub>i</sub>-e kuttappeduthi  
 Rajan that bugger.Acc blamed  
 ‘Rajan blamed that bugger’

Consequently, we get two different readings when the a bare singular nominal is repeated depending upon whether the nominal refers to a generic collective reading or a definite individual:

48. manushyan manushyane thinnunna na:du  
 human human.Acc eat-relativiser country  
 ‘Country where humans eat humans’

49. a:san a:sane kuttappeduthi  
 Master master.Acc blamed  
 ‘The Master blamed himself’

48 cannot have a reflexive reading that they eat themselves. The bare singular nominal here refers to a generic group ‘human kind’; the ‘reflexivity’ can be mapped only to the kind referred to as a single undifferentiated whole as opposed to 49 where the reference is to a definite individual. Similar reading obtained for bare plurals:

50. na:ykkal na:ykkale thinnunna na:du  
 dogs dogs.Acc eat-relativiser country  
 ‘Country where dogs eat dogs’

51. ra:shtri:yakka:r ra:shtri:yakka:reye: saha:yikku:  
 politicians politicians.Acc-focus help-focus  
 ‘Politicians help only politicians’

In all three sentences above (viz. 48, 50 and 51) humans, dogs, and politicians have a generic reading in Malayalam and the actions are defined over the unindividuated collective class they belong to, and not to the definite individual members of the class. Thus, the group is referred back to itself as a property rather than as individual entities possessing that property. Now, if we can obtain a reflexive reading with a referential name, logically speaking, there is no reason why we should be unable to get a reflexive reading for a definite description that is not constrained by a generic reading and hence can be individuated. We do get a reflexive reading in the following context:

52. Who did that child vote for?  
 53. a: kutti a: kuttikku vote ceythu  
 that child that child.Dat vote did  
 ‘That child voted for him/herself.’

Interestingly, this observation is carried over to other quantified NPs as well. As we saw, a quantified NP refers to a collectively defined group and cannot obtain a reflexive reading over the individual members of the group.

54. \*mu:nnu ammama:r mu:nnu ammama:re kuttappeduthi  
 three mothers three mothers.Acc blamed  
 ‘Three mothers blamed three mothers’

The sentence cannot be salvaged even with emphatic elements of focus.

55. \*mu:nnu ammama:r mu:nnu ammama:re tanne kuttappeduthi  
 three mothers three mothers.Acc tanne blamed

To get a reading where the action is defined over the individual members, a distributive construction should be used where reference is made to all the individuals denoted by the group, thus individuating the generic reference:

56. 3 ammama:r avaravare kuttappeduthi (all others blamed the teachers)  
 3 ammama:r they-them blamed  
 3 mothers blamed themselves

57. ra:shtri:yakka:r avaravare ma:thrame: pukazhthukayullu:  
 politicians they-them only-foc praise-be-foc  
 ‘Politicians praise only themselves’

In both the above examples, reference is made to the individual members of the kind referred to by the bare nominals. Apart from the distributive reading, making the group into a definite description produces a reflexive reading in a somewhat non-local context.

Context: There is a bunch of people going on a hike. Everybody has been assigned to carry something except three persons. Someone new to the group asks “what about those three?”  
 48 is a grammatical answer.

58. a: 3 pe:r a: 3 pe:rude sa:dhannangal ma:thrame: edukkukayullu:  
 that 3 people that 3 people-gen things only-focus take-be-focus  
 ‘Those three people carry only their stuff’.

The fact that definiteness has some important role to play in such constructions seems to be responsible for the inability of the same indefinite NP to appear twice in a sentence such as below, even when the two NPs refer to two different entities.

59. \*oru na:ya oru na:yaye kadichu  
 a dog a dog.Acc bit  
 to mean: ‘A dog bit another dog’

Like in English, one has to use ‘another dog’.

60. oru na:ya mattoru/ve:roru na:yaye kadichu  
 a dog another dog.Acc bit  
 ‘A dog bit another dog’



The reading improves considerably in the following example where an indefinite is forced into a definite description through a demonstrative that can then function as an antecedent for a definite NP referring to the same entity:

61. a: oru kochu    a: kochinte ma:thram    sa:dhanangale:    edukkukayullu:  
       that one child    that one child's only    stuff-focus    carry-be-focus  
       ‘That one child carries only his/her stuff’.

This goes against the Identical Antecedent Requirement, in a narrow sense. As we noted earlier, Malayalam does not have local lexical anaphors. Apart from the same R-expression, a pronoun also can be used in less local contexts such as the following:

62. a: 3 pe:r        avar-ude    sa:dhannangal    ma:thrame:    edukkukayullu:  
       that 3 people    they-gen    things                    only-focus    take-be-focus  
       ‘Those three people carry only their stuff’.

63. a: 3 pe:rum        avar-ude        sa:dhannangal    ma:thrame:    edukkukayullu:  
       that 3 people.Conj they-gen        things                    only-focus    take-be-focus  
       ‘Those three people carry only their stuff’.

We saw that unlike Thai or Zapotec, R-expressions and pronouns exhibit different behaviour in Malayalam. How do pronouns fare against a bound variable reading? In sentences like the following, is the second pronoun an instance of a bound copy?

64. avan    avan-u    vote ceythu  
       He    he.Dat    vote did  
       ‘He voted for him/himself’

Applying VP ellipsis test, we see that the elided pronoun follows exactly the reference of the overt one.

65. avan    avan-u vote ceythu;    avalum  
       He    he.Dat vote did        she.Conj  
       Meaning: She voted for whomever he voted for. If he voted for himself, then she voted for him; if he voted for another person, then she voted for that person.

Thus, the second pronoun is not a bound variable. This can be tested by other tests as well. For example, in the example 66, the sentence does not have the interpretation (as we obtain in English) that ‘nobody else did their homework’. Similarly, none of the other examples 66-69 show a bound variable interpretation supporting the argument that the second occurrence of the NP retains its potential for independent reference<sup>32</sup>.

<sup>32</sup> To obtain a bound variable reading in these constructions one has to use a covert pronoun. Considering the fact that Malayalam does not have Subject-Verb agreement, this is in line with Holmberg and Roberts (2013).

66.  $nja:n-e$ : ente homework ceythullu:  
 I-Foc my homework did-Foc  
 ‘Only I did my homework’
67.  $avan_i/John$  vanna vazhi ella:varum $_i$  marannu  
 he/John came-a way all forgot  
 ‘Everybody forgot the way he/John came’
68.  $enikku$  manasila:kunn-a oru codyam enikke: kittiyullu:  
 me understand-rel a question I-Foc got-Foc  
 ‘Only I got a question that I understand’
69.  $avanu$  manasila:kunn-a oru codyam avane: kittiyullu:  
 him understand-rel a question him-Foc got-Foc  
 ‘Only he got a question that he understands’

Perhaps the argument that the pronouns always retain their potential for definite reference and hence cannot act as a bound variable, just like R-expressions, can be supported by the fact that variable binding by Wh or by quantifiers is not possible:

70.  $avan_i$  smart a:nu ennu a:ru $_j/*_i$  paranju?  
 He smart be Comp who said  
 ‘Who said that he is smart?’
71. a:ru $_i$  a:nu  $avan_i$  smart a:nu ennu paranjathu?  
 Who be he smart is Comp who said  
 ‘Who said that he is smart?’

- 
1.  $nja:ne$   $\phi$  homework ceythullu:  
 I-Foc HW did-Foc  
 ‘Only I did my HW’.
2.  $\phi_i$  vanna vazhi ella:varum $_i$  marannu  
 came-rel way all forgot  
 ‘Everyone forgot the way they came’
3.  $\phi$  manasila:kunn-a oru codyam enikke: kittiyullu:  
 understand-rel a question I-Foc got-Foc  
 ‘Only I got a question that I understand’
4.  $\phi$  manasila:kunn-a oru codyam avane: kittiyullu:  
 understand-rel a question he-Fo got-Foc  
 ‘Only he got a question that he understands’
5.  $\phi$  manasila:kunn-a oru codyam Karambikke: kittiyullu:  
 understand-rel a question Karambi-Foc got-Foc  
 ‘Only Karambi got a question that she understands’

72. avane<sub>i</sub> ni: kandu ennu a:ra\*<sub>i</sub>:nu vicha:richathu?  
 Him you saw comp who.be thought  
 ‘Who thought that you saw him?’
73. ni: avane<sub>i</sub> kandu ennu vicha:rikkunna kutti<sub>j</sub>/\*<sub>i</sub>  
 you him saw comp think-Rel child  
 ‘The child who thinks you saw him’
74. a:rkk<sub>i</sub> a:nu avante\*<sub>i</sub> ammaye ishtamullathu?  
 Who be his mother love.has.Sg.N.  
 ‘Who loves his mother?’
75. a:r<sub>i</sub> a:nu avante\*<sub>i</sub> ammaye kandathu?  
 Who be his mother saw.Sg.N.  
 ‘Who saw his mother?’
76. ella:varum avane (tanne) kuttappeduthi  
 all/everyone him emphatic blamed  
 ‘Everyone blamed him/\*himself’
77. ella:varum avare kuttappeduthi  
 all/everyone them blamed  
 ‘Everyone blamed them/\*themselves’

Again, distributive forms are the only way to induce an individuated reading:

78. ella:varum avanavane/avaravare kuttappeduthi  
 all/everyone themselves blamed  
 ‘Everyone blamed themselves’
79. ella:varum<sub>i</sub> avante\*<sub>i</sub> ammaye kuttappeduthi  
 all/everyone his mother blamed  
 ‘Everyone blamed his mother’
80. ella:varum<sub>i</sub> avarude\*<sub>i</sub> ammaye kuttappeduthi  
 all/everyone their mother blamed  
 ‘Everyone blamed their mother’
81. ella:varum<sub>i</sub> avar-avarude<sub>i</sub> ammaye kuttappeduthi  
 all/everyone they-their mother blamed  
 ‘Everyone blamed their mother’
82. a:rum avane kuttappeduthi illa  
 nobody him blamed be<sub>Neg</sub>  
 ‘Nobody blamed him’

83. a:rum      avare    kuttappeduthi    illa  
       nobody    them    blamed                be<sub>Neg</sub>  
       ‘Nobody blamed them’
84. a:rum      avar-avare    kuttappeduthi    illa  
       nobody    they-them    blamed                be<sub>Neg</sub>  
       ‘Nobody blamed themselves’
85. avan<sub>i</sub>    midukkan    a:nu    ennu    o:ro: po:li:suka:ranum\*<sub>i</sub>    vicha:ricchu  
       he      smart      be      comp    each policeman                thought  
       ‘Each policeman thought that he is smart’

Thus, it is clear that although pronouns can corefer with an antecedent, they behave more like definite descriptions and pattern with R-expressions than standard pronouns where binding is concerned. Obviously, all the pronouns above carry the distal morpheme and can be used indexically. Being inherently referential in nature, the distal pronouns can function as E-type donkey pronouns as well.

#### 4.4 Pro-noun, Pro-phi or Pro-DP?

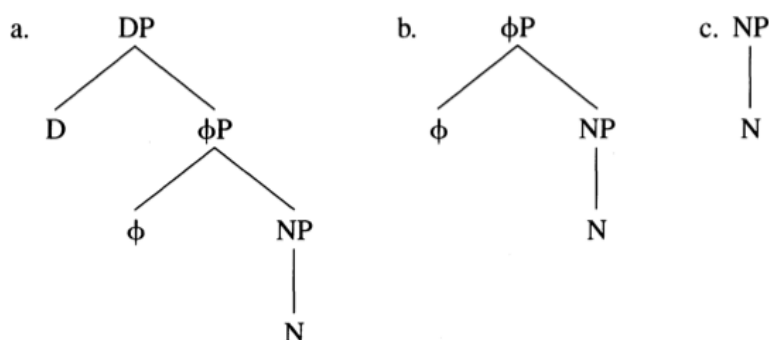
The previous sections presented data to show that Malayalam does not have a pure Reflexive pronoun, the nominal used as pronouns are resistant to function as bound variables and finally, R-expressions can be used repeatedly to express coreference. Combined with the fact that there seems to be a proliferation of third person ‘pronouns’ in the language<sup>33</sup>, these nominals incline towards definite descriptions with rigid references. In this context, it is worth introducing the proposal by Déchaine and Wiltschko (2002) (hereafter D&W) that problematizes taking ‘pronoun’ as a primitive of linguistic theory. The following section describes the proposal and shows that the so-called third person pronouns in Malayalam are pro-DPs.

D&W argues that “ [ ... ] it is necessary to recognize (at least) three pronoun types: pro-DP, pro- $\Phi$ P, and pro-NP.” (p.409). They mainly draw evidence from the internal structure of pro-forms, ability to function as argument/predicate, and the binding-theoretic properties. The three possibilities and their properties are given below (p.410):

---

<sup>33</sup> see Jayaseelan (1999), pages:39-40

Fig:1

*Nominal proform typology*

	Pro-DP	Pro- $\phi P$	Pro-NP
Internal syntax	D syntax; morphologically complex	neither D syntax nor N syntax	N syntax
Distribution	argument	argument or predicate	predicate
Semantics	definite	—	constant
Binding-theoretic status	R-expression	variable	—

The typologically assigned names are pretty much explicit vis-a-vis their internal structure. Thus, a pro-DP behaves in ways similar to a definite description or an R-expression, a pro- $\Phi P$  corresponds to a “standard Condition B pronoun” and a pro-NP is expected to show the “same syntax as lexical nouns” (p.411).

If there are different types of pronominals, then it makes sense to talk about different type of phonetically null pronominals as well. Indeed, D&W mentions this possibility. Holmberg (2005) suggests that while the null subject *pro* in Spanish and Greek are D-less  $\Phi P$ s while null first and second person subjects in Finnish are DPs that are deleted.

As we saw in the previous section, third person pronouns do not behave like standard Condition B pronouns. However, *pro* indeed function as a bound variable and is used in positions where one expects to find a bound variable. This suggests the obvious conclusion that third person pronoun and *pro* in Malayalam differ in their internal structure according to a distinction that D&W propose.

Malayalam third person pronouns are pro-DPs

It has already been shown in the previous section that the third person pronoun in Malayalam does not lend itself to variable binding and behave like a definite description.

Some relevant data is reproduced below:

86. ella:varum     avane     kuttappeduthi  
all/everyone     him     blamed  
'Everyone blamed him/\*himself'

87. ella:varum     avare     kuttappeduthi  
all/everyone     them     blamed  
'Everyone blamed them/\*themselves'

Not only that the pronoun cannot be bound, there are instances where an R-expression and a third person pronoun behave the same, as in the following sentences where a language like English employs a reflexive pronoun:

88. Rajan     Rajan-u     vote     ceythu;     Priyaum  
Rajan     Rajan.Dat     vote     did     Priya.Conj  
Rajan voted for Rajan; Priya, too.  
Meaning: Priya voted for Rajan.

89. avan     avan-u     vote     ceythu;     avalum  
He     he.Dat     vote     did     she.Conj  
Lit: He voted for him; she too.

Meaning: She voted for whoever he voted for. If he voted for himself, then she voted for him; if he voted for another person, then she voted for that person.

Binding-theoretically, the third person pronoun in Malayalam patterns with an R-expression or a definite description rather than getting its reference from an antecedent, making it a pro-DP as per D&W. Furthermore, as shown in the ellipsis examples above, the elided pronoun invokes only the strict reading, making it a definite description rather than a bound pronoun.

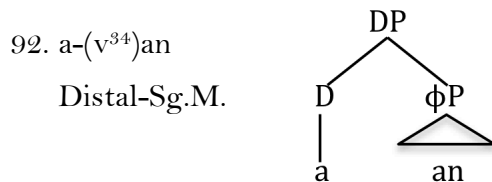
The third person pronoun in Malayalam, as noted before, is made up of two morphemes – a distal morpheme and a morpheme that manifests the relevant number/gender feature. The latter morpheme can be seen in certain other contexts as well. Nominalised clauses provide such a context:

90. innale     vanna-(v)an  
yesterday     came.Sg.M.  
The man/boy who came yesterday.

However, the morpheme cannot appear independently in an argument position:

91. \*an innale vannu  
 Sg.M. yesterday came.  
 He came yesterday.

This gives us the following structure that D&W proposes for pro-DPs:



#### 4.5 Third Person Pronouns as Inherently Referential

Pro-DPs have something inbuilt in them that prevent them from functioning as a bound variable. Obviously, pro- $\phi$ Ps have no such burden to bear and hence can be bound. This makes it inevitable that we delve a little deeper into the composition of a pro-DP. In order to do this, I follow Elbourne (2005) for a semantic explanation of definite descriptions.

If pro-DPs cannot be bound and pro- $\phi$ Ps can, then the reason that suggests itself is that it is the D part that makes a difference. This seems to be morphologically substantiated as well since *taan*, *swayam*, and pro- $\phi$ P all lack the deictic part of the pro-DP in Malayalam. Also, we saw that the third person pronoun and an R-expression can appear in unexpected domains in Malayalam, sometimes in the same domains of coreference, presenting conventional Binding Theory with an anomaly.

Elbourne (2005) does not iron out those anomalies; it is not the purpose of the theoretical model suggested in the work either. Elbourne (2005) is relevant in the discussion here because it attempts to point out the similarities between R-Expressions, definite descriptions and pronouns in English. According to this model:

“ [ ... ] pronouns, definite descriptions, and proper names can profitably be viewed as having a common syntactic structure [ [ THE *i* ] NP ] [ ... ]” (p.185).

<sup>34</sup> v shows up as a phonetic insertion of a glide between two vowels.

While this model does not argue that pronouns, R-expressions and definite descriptions all should exhibit the same behavior, it does imply that there may be more similarities between pronouns and R-expressions than the predictions of traditional binding principles. This is indeed what we see in Malayalam.

As we saw in the earlier sections, both R-expressions and pronouns behave the same w.r.t. Identical Antecedent Requirement and an R-expression can appear in the place of a pronoun while binding into a complement domain:

93. Rajan Rajane pukazhthi  
 Rajan Rajan.Acc praised  
 Rajan praised himself
94. avan avane pukazhthi  
 he him praised  
 He praised himself.
95. Rajan vicharichu avan/Rajan jeyikkum ennu  
 Rajan thought he/Rajan win.Fut comp  
 Rajan thought that he will win.

Elbourne (2005) explores the Japanese pronouns *kare* and *kanozyo* which display behaviour similar to Malayalam pronouns we explored above in that in certain dialects these pronouns can be referential but not bound (Japanese data from Elbourne 2005, p.162).

96. John<sub>i</sub>-ga kare<sub>i</sub>-no musume-no atarasiisiasin-o motteiru  
 John-Nom he-Gen daughter-Gen new photo.Acc has  
 John<sub>i</sub> has a new photo of his<sub>i</sub> daughter.
97. \*Dono titioya-mo<sub>i</sub>kare<sub>i</sub>-no musume-no atarasiisiasin-o motteiru  
 Every father he-Gen daughter-Gen new photo.Acc has  
 Every father<sub>i</sub> has a new photo of his<sub>i</sub> daughter.

Malayalam third person pronoun behaves the same in similar contexts in that it cannot be bound by a quantifier:

98. Johninu avante makalude oru puthiya padam kitti  
 John.Dat his daughter.Gen a new picture got  
 John<sub>i</sub> got a new picture of his<sub>i</sub> daughter
99. \*ella: achanum avante makalude oru puthiya padam kitti  
 all father.Dat.Conj his daughter.Gen a new picture got  
 Every father<sub>i</sub> got a new picture of his<sub>i</sub> daughter



It is further noted in the discussion that “[...] Japanese nouns can quite generally be used with no overt determiner and receive an indefinite interpretation (‘an N’), but this is completely impossible with *kare*.” (p.163). This holds true for Malayalam data as well.

100. A: What happened to Rajan?

B: Rajane patti kadichu.

Rajan.Acc dog bit

A dog bit Rajan.

Here, the bare noun *patti* ‘dog’ can be used as an indefinite. However, this is not an available use for the third person pronouns like *avan* ‘he’, *aval* ‘she’ etc. in Malayalam. There are no contexts where these words can be used as indefinites.

Discussing these properties of what he calls the *ka*-series pronouns in Japanese, Elbourne (2005) proposes the following: “There is one type of expression in the standard logical languages we use which could be referential, could be applied to many people indiscriminately like a pronoun, and yet would not be capable of being bound, and that is a bland definite description. I suppose, then, that  $\llbracket \text{[kare]} \rrbracket = ix \text{ male}(x)$ , and  $\llbracket \text{[kanozyo]} \rrbracket = ix \text{ female}(x)$ .” (p.163). These, it is argued in the book, cannot be bound because there are no free variables in them<sup>35</sup>.

Extending this model to Malayalam, we get the semantic description  $\llbracket \text{[avan]} \rrbracket = ix \text{ male}(x)$ ,  $\llbracket \text{[aval]} \rrbracket = ix \text{ female}(x)$  and so on for what is subsumed under the blanket term third person pronoun. In other words, they are definite descriptions – DPs – with the description  $\llbracket \text{[THE } i \text{ ] NP} \rrbracket$  that finds an overt morphological instantiation as  $\llbracket \text{[a}_i \text{] an} \rrbracket$ ,  $\llbracket \text{[a}_i \text{] al} \rrbracket$  etc. In fact, this NP finds a range of possibilities in Malayalam in that the NP could be *aal* ‘person’ as in *ayaal* ‘that person’, *kaaryam* ‘matter’ as in *akkaaryam* ‘that matter’ etc. where the overt deictic component /a-/ or /i-/ manifests the referential element and the latter half manifests the NP component.

Apart from this we already saw that in the Dechaine and Wiltchko (2002) framework also predicted independently that the overt third person pronouns in Malayalam are pro-DPs as

<sup>35</sup> Elbourne (2005) also makes a prediction that the lack of this individual variable is no hindrance to these pronouns being used in the donkey anaphora context. This prediction is true for Malayalam, just like Japanese.

penpille:r ulla ella:varakkum avare skoolil vidanda chumathalayum undu.  
 Girl children have all.Dat.Conj them school.Loc send duty.Conj have.  
 Everyone who has daughters also has a duty to send them to school.

opposed to the null pro in bound contexts, which are pro- $\Phi$ Ps. As we saw, a third person pronoun in Malayalam cannot appear in a context where it is interpreted as an indefinite expression. Elbourne (2005) makes it clear that these pronominals have no free variables that can be bound, they are inherently referential, owing to the deictic element in them. As the data from Malayalam clearly shows, pronominals that lack this deictic anchoring, viz. *taan*, and *swayam* do not have the capacity for independent reference substantiating the proposal above about where third person pronouns derive their referentiality from.

Of course, one would expect, then, R-expressions to show more similarities to definite descriptions and pronouns if one subscribes to Elbourne (2005). If pronominals like *aval*, *avan* etc. can have overt manifestation of the presumable D part, can R-expressions do the same? Since Malayalam does not have definite articles, we need to use demonstratives and indefinite articles to see if there is always mandatory N to D movement in the case of R-expressions (see Longobardi 1994)

It turns out that R-expressions in Malayalam can and do appear with demonstratives and the indefinite article to tweak the reference.

Context: Talking about someone who the speaker does not know well (he has met the person only once) and the addressee does not even know the existence of.

101. Priyayude bhārthaavu oru Rajan undu. (He did that.)  
 Priya.Gen husband one Rajan be.  
 There is a Rajan who is Priya's husband.

R-expressions appear with demonstratives as well as can be seen from the following example. In such cases, the demonstrative somehow emphatically picks out the person and also somehow distancing oneself from the person.

102. a: Rajan a:nu ithokke paranju parathunnathu  
 that Rajan be this.all said spread.SgN  
 It is that Rajan who spreads all these (rumours).

In this example the speaker expects that the addressee knows Rajan as opposed to the use of R-expression with the indefinite article in the previous example. The demonstrative functions rather as an overt marker in establishing the reference of the nominal *Rajan*. This is even more palpable in the following example where *Rajan* must be someone that the speaker and addressee have talked about before.

103. a: Rajan innale vanna:yirunnu  
 that Rajan yesterday came.be.be.  
 ‘That Rajan had come yesterday.’

In this example, the use of the demonstrative is infelicitous if the addressee does not know Rajan. More over, this would be uttered most naturally in a situation where Rajan is not closely associated with the speaker at all, implying a distance between the speaker and Rajan. Thus kinship terms resist being used with a demonstrative, as shown below<sup>36</sup> indicating that probably there are situations where N to D movement is obligatory.

104. #\* a: achchan innale vanna:yirunnu  
 that father yesterday came.be.be.  
 That Father had come yesterday.

Nevertheless, the data is clear in pointing to the fact that R-expressions, pronouns and definite descriptions all share a similar abstract relation.

How, then, is the pronominal *ayaal* ‘He<sub>honorific</sub>’ different from *aa aal* ‘that person’? Elbourne (2005) makes it explicitly clear that the underlying similarity does not mean that definite descriptions and pronouns and R-expressions will have the same syntax and semantics (p.18). What we are concerned with here is rather the pronominal structure and how that can be altered to yield a DP that can be varyingly employed to produce interrogative, negative polarity, existential and other interpretations?

#### 4.6 Making an Indeterminate Pronoun

As we saw in the beginning, Wh words in Malayalam falls into a paradigm that consists of third person pronominals. The table is reproduced below:

e-nthu	What	a-thu	that	i-thu	this
e:-thu	Which				
e-vide	Where	a-vide	there	i-vide	here
e-ngane	How	a-ngane	thus	i-ngane	thus

<sup>36</sup> May be the reader is tempted to argue that this is because of the presence of a null possessor that turns Father into My Father. However, this may not be a profitable way of going because one can have sentences like the following where the Modifier-Demonstrative-NP order is perfectly natural.

Rajante a: pattiye nja:n kandu  
 Rajan’s that dog.Acc I saw  
 I saw that dog of Rajan.

e-ppo:l	When	a-ppo:l	then	i-ppo:l	now
e-nnu	Which day	a-nnu	that day	i-nnu	today
e-thra	how much	a-thra	that much	i-thra	this much

Is straightforwardly obvious from the table that it is the deictic part that is being altered in forming a question word. As we saw, it is precisely this part that manifests the referential nature of the DP in a third person pronoun, transforming the word into a DP that leaves the reference open and not definite, to borrow a well-known terminology from the Japanese linguistic tradition, a DP of indeterminate reference *aka* “indeterminate pronouns” (Kuroda 1965).

What we have here is a DP of no fixed reference created by substituting the referential deictic part of the DP with an indeterminate reference. In other words, this transforms the referential pronominal DP into an open expression with unspecified reference that is in a complement relation to its restrictor, the phi/place/time part, and is amenable to be bound by an operator. Thus, *evide* ‘where’ is literally *e-ide* ‘e-at place’ or, to paraphrase, ‘at --- place’.

As Shimoyama (2006) points out, these pronominals do not have an inherent interrogative meaning; the interpretation is dependent on the operator and hence, can participate in different types of quantification depending on the operator that is associated with it. All that the indeterminate pronoun does is to make an open expression along with a restrictor available for different operators.

Similar to Japanese, these indeterminate DPs can make use of a number of operators to form quantifiers. For example, a Wh word, when appearing with the conjunction marker behaves as a polarity item. Some examples are given below.

105. aarum vanilla  
Wh.Conj came.beNeg  
Nobody came
106. \*aarum vannu  
Wh.Conj came.
107. aar-o: vanilla  
Wh.Conj came. beNeg  
Someone did not come
108. aar-o: vannu  
Wh.Conj came.  
Someone came

109. aar-engilum varum  
 Wh-if.Conj will come  
 Someone may come

However, it should be noted that, unlike Chinese, the Wh words in Malayalam needs an operator to turn it into a indefinite expression similar in reading to ‘someone’ or ‘nobody’. Thus, it is more appropriate to describe the Wh as an open expression or an indeterminate pronoun rather than an indefinite although the movement options of both are marked by a lack of quantificational force. The parallels between a Wh and indefinite expression are discussed in the next chapter, in section 5.2.

#### 4.7 Wh = Variable? Cole and Hermon (1998)

As we saw, a Wh in Malayalam is formed by substituting the D with the morpheme |e-| which turns a pro-DP into an open expression. The question that is pertinent here is that if being an open expression necessarily means being a variable.

Cole and Hermon (1998), while discussing interrogatives in Malay have proposed various possibilities for a Wh-variable to combine with an operator that binds it. Subscribing to the idea of “unselective binding (in the spirit of Heim 1982 and Reinhart 1993)” (p.224), they proposed that “unselective binding is possible only if the language allows a pure variable to occur in-situ” (p.248). English had the Operator and the Variable fused into a single lexical item whereas Chinese made up the other extreme where the Wh word is a pure variable. Two diagnostics from Cheng and Huang (1996) is employed to show that the Wh arguments are pure variables in Chinese (p.238):

Chinese bare conditionals

110. Shei xian lai, shei jiu xian chi  
 Who first comes who then first eats  
 ‘If x comes first, x eats first’.

Ability to combine directly with non-question operators

111. Wo shenme dou bu zhidao  
 I what all not know  
 ‘I don’t know anything’

Applying these tests to Malayalam, we find that such bare conditionals are not possible in Malayalam; in constructions where conditional with a Wh is possible, an overt operator is required.

112. aaru aadyam varunn-o: avarkku aadyam kazhikkaam  
 Who first come-Disj they.Dat first eat.may  
 Whoever comes first may eat first

113. aadyam varunnathu aar-aan-o: avarkku aadyam kazhikkaam  
 First come.Sg.N. who-be-Disj they.Dat first eat.may  
 Whoever comes first may eat first

The disjunction operator is mandatory in both the constructions although, the place where the operator can appear vary along the lines we saw vis-à-vis the attachment cites for Q.

As for negation, we again see that a bare Wh is ungrammatical.

114. \*aaru wann-illa  
 who came- be<sub>Neg</sub>

The sentence is ungrammatical as a content question; neither does it get the interpretation of ‘Nobody came’. For the latter interpretation, the Wh needs to be turned into an indefinite with the help of the Conjunction operator as follows:

115. aarum wann-illa  
 who.Conj came- be<sub>Neg</sub>  
 Nobody came.

Thus Malayalam Wh words, although open expressions, are not independent variables at par with Chinese Wh words.

#### 4.8 Summary

This chapter analysed the make up of a Wh word in Malayalam where they fall into a paradigmatic relation with third person pronominals. This lead to analyse the rponominal system first, and was proposed that the so-called third person pronouns in the language are pro-DPs in the sense of Dechaine and Wiltchko (2002). The agglutinative nature of Malayalam made a decomposition of these pronouns easier and it was shown that the referential D part of the DP is encoded by deictic affixes. It is this referential D part that is substituted with a non-referential non-definite affix in a Wh word, effectively turning the DP into an open expression.

## Chapter 5

### Wh in Interrogative Constructions

So far we discussed the two constructions that are most relevant to form a content question in Malayalam, namely, verb-final and the categorical *aanu* construction. We explored the morphology of the Wh. However, apart from brief mentions of empirical data, we have not discussed the behavior of Wh in these constructions. This is the theme of this chapter.

The blanket division vis-à-vis the overt position of Wh in an interrogative construction is derived from the English-type languages where the Wh obligatorily occupies a sentence initial position regardless of the position of the same argument/adjunct when it is a non-Wh word. In other words, there are languages that can be described as exhibiting Wh-movement. The theoretical developments account for this by modeling this in terms of a licensing element at the C-domain, with the Wh moving to be in a very local configuration with the licensing element, thereby bringing the entire CP/clause within its scope.

However, there are many languages that do not find the need to overtly place the Wh in such a local configuration, assuming the simple Universalist position that the Wh is licensed by a C-level element. Mostly, these languages could leave the Wh in the same position as a non-Wh word and still interpret the sentence as a content question. This leads to the descriptive label Wh-in-situ languages. Japanese, Chinese etc. were categorized this way. It will be argued in this chapter that Malayalam verb-final constructions are wh in-situ. As opposed to this, the *aanu* construction involves Wh ex-situ whenever the Wh is base-generated within the IP.

We begin by exploring the position of Wh in verb-final and categorical *aanu* constructions in little more detail in section 5.1. A bare Wh is canonically described as in-situ in verb-final constructions (Asher and Kumari 1997). Yet, a bare Wh cannot appear in the canonical subject position in the unmarked SOV order in certain sentences, for example in a sentence with a transitive verb. Section 5.2 delves into this and shows that a bare Wh patterns with indefinites; indefinites are not amenable to movement. Section 5.3 shows that a Wh is amenable to scrambling when associated with an element that renders it partitive specific or with quantificational force in some way. Section 5.4 explores the argument by Jayaseelan

(2001) that Malayalam verb-final constructions are in fact Wh ex-situ constructions. Drawing data from the parallels between indefinites and Wh as well as intervention effects, it is argued in this section that the simplest assumption is one in which we apply Occum's razor and stick to an in-situ analysis. As opposed to this, *aanu* construction needs the Wh to be the predication base for it to be grammatical, as shown in Section 5.5. Thus, both in-situ and ex-situ are strategies used in Malayalam to form an interrogative construction. The issue whether this movement is focus movement or not is discussed in the next sections, 5.6. and 5.7 whereas 5.8 concludes the chapter.

### 5.1 Wh in the Verb-final Construction

Malayalam is traditionally described as a Wh-in-situ language (Asher and Kumari 1997). Some examples of content questions are given below:

1. a. Rajan Priyaye kandu.  
Rajan Priya.Acc saw  
Rajan saw Priya.
- b. Rajan aare kandu?  
Rajan whom saw  
Whom did Rajan see?
2. a. Rajan vi:ttil po:yi  
Rajan to home went  
Rajan went home
- b. Rajan evide po:yi?  
Rajan where went  
Hre did Rajan go?
3. a. Rajan Priyayku orupu:chaye koduthu.  
Rajan Priya.Dat a cat.Acc gave  
Rajan gave a cat to Priya.
- b. Rajan Priyayku enthu koduthu?  
Rajan Priya.Dat what gave  
What did Rajan give Priya?

As seen in the above examples, simple substitution of the relevant linguistic item with a Wh word forms a content question in a verb-final construction.



The unmarked word order in Malayalam is SOV. However, as shown in the following example, a subject Wh cannot appear in the canonical word order.

4. \*aaru Rajane kandu?

Who Rajan.Acc saw?

Who saw Rajan?

5. Rajane aaru kandu?

Rajan.Acc who saw?

Who saw Rajan?

Malayalam is a language that employs scrambling, as shown below.

6. Rajan Priyayku a: pu:chaye koduthu

Rajan Priya.Dat that cat.Acc gave

Rajan gave Priya that cat.

7. Priyayku Rajan a: pu:chaye koduthu

8. a: pu:chaye Rajan Priyayku koduthu

9. Rajan a: pu:chaye Priyayku koduthu

Any argument can appear in the beginning of the sentence as can be seen from the above examples. This freedom of word order is, however, not available to a Wh. A Wh is uniformly bad in the beginning of a question.

10. \*a:ru Priyayku pu:chaye koduthu?

who Priya.Dat cat.Acc gave

Who gave Priya (a) cat?

11. \*a:rkku Rajan pu:chaye koduthu?

whom Rajan cat.Acc gave

Whom did Rajan give (a) cat to?

12. \*enthu Rajan Priyayku koduthu?

what Rajan Priya.Dat gave

What did Rajan give Priya?

13. \*a:ru pu:chaye Priyayku koduthu?

who cat.Acc Priya.Dat gave

Who gave Priya (a) cat?

On the other hand, the following examples where the Wh is not in the sentence initial position are grammatical.

14. Priyayku a:ru pu:chaye koduthu?

Priya.Dat who cat.Acc gave

Who gave Priya (a) cat?

15. Rajan a:rkku pu:chaye koduthu?  
 Rajan whom cat.Acc gave  
 Whom did Rajan give (a) cat to?
16. Rajan Priyayku enthu koduthu?  
 Rajan Priya.Dat what gave  
 What did Rajan give Priya?
17. a: pu:chaye a:ru Priyayku koduthu?  
 That cat.Acc who Priya.Dat gave  
 Who gave Priya that cat?

Thus it seems that Wh is ungrammatical when it occurs in the sentence initial position. Yet, proposing a strict ‘Left Edge Condition’ is bound to fall flat immediately as seen from the following data:

18. a:ru vannu?  
 Who came  
 Who came?
19. enthu sambhavichu?  
 What happened  
 What happened?

Yet, as examples 10-13 shows, it is ungrammatical for the subject Wh to precede the other arguments in an interrogative sentence. It will be shown in the next section that this restriction is a more general one regarding the interaction between indefinite and definite expressions.

## 5.2 Parallels between Wh and Indefinites

The restriction rather pertains to the freedom of movement of different lexical items in Malayalam, regardless of the fact whether they appear in declarative or interrogative constructions. Consider the following pair of declarative sentences:

20. Rajan onniladhikam pusthakam me:dichu.  
 Rajan more than one book bought  
 Rajan bought more than one book.
21. \*onniladhikam pusthakam Rajan me:dichu  
 more than one book Rajan bought  
 Rajan bought more than one book

We see the same effect with other indefinites as ‘some’, and ‘many’. Look at the following examples.

22. avane palaru kandu

he.Acc several people saw

Several people saw him

23. \*palaru avane kandu

24. njaan chilathu kandu

I something saw

I saw something

25. \*chilathu njaan kandu

Again, just like the Wh constructions we saw earlier, it is not the sentence initial position that is problematic for an indefinite as the following examples show:

26. chilaru vannu

some people came

Some people came.

27. chila muTTa virinju

some egg hatched

Some eggs hatched.

It has been argued in the literature that indefinites lack quantificational force and remains *in situ* as opposed to definite phrases that can undergo movement (Deising 1992, Berman 1991 a.o.). Thus it seems more prudent to explain the above examples as instances where the indefinites stays in-situ while the definite expressions move to higher positions, leading to the surface effect that the indefinites rarely appear in the sentence initial position in the presence of another definite expression in the same clause.

This is in fact, in line with what we explored in Chapter 2 vis-à-vis the left edge of a verb-final construction. We saw that there exists a left edge Topic position in the language. A Topic position is characterized by its aversion to indefinite non-specific elements. Thus it seems that what happens in minimal pairs like 22-25 is that whenever there is a suitable phrase in the clause, this Topic position is invoked, and the definite/specific phrase must occupy this position. However, the indefinites are grammatical in the beginning of the clause when there are no other definite/specific phrases in the clause. In these cases, it can be shown that the indefinites are below the Topic position:

28. bhagyathinu chilaru vannu  
 fortunately, some people came  
 Fortunately, some people came.
29. \*chilaru bhagyathinu vannu  
 some people fortunately came  
 Fortunately, some people came.
30. avan bhagyathinu vannu  
 he fortunately came  
 Fortunately, he came.

As seen in the above example, the high adverb ‘fortunately’ is grammatical when it occurs above the indefinite. Movement of an indefinite beyond this adverb results in ungrammaticality. On the contrary, a definite phrase is perfectly legitimate in this position. Now, the examples 22-25 can be explained as this: in the example 22, the definite expression *avane* moves out of the vP, leaving the indefinite Subject lower. In 25, the indefinite object has moved to a higher position past the definite subject, resulting in ungrammaticality.

Indefinites may appear at the left edge in Malayalam; however, these indefinites are interpreted as Specific, rendering them amenable to the Topic position.

31. Rajane ora:l kandu  
 Rajan.Acc a person saw  
 Someone saw Rajan
32. ora:l Rajane kandu  
 a person Rajan.Acc saw  
 Someone saw Rajan  
 Meaning: There is a specific person who saw Rajan
33. njaan Rajanu kaashu koduthu  
 I.Nom Rajan.Dat money gave  
 I gave money to Rajan
34. kaashu njaan Rajanu koduthu  
 money I.Nom Rajan.Dat gave  
 I gave the money to Rajan

*ora:l* in 31 is interpreted as a non-Specific indefinite person whereas in 32, the same word when it appears at the left edge gets the meaning of a Specific person. Similarly, in 33, *kaashu* means just ‘money’ and not any specific amount or money that has been talked about.

However, in 34, *kaashu* refers to the specific token of money that is under discussion, the Specificity making the indefinite amenable for movement.

In other words, the hypothesis that the indefinites cannot occupy the left edge because the left edge Topic position requires a referential element makes a prediction that if there is a way to render an indefinite somehow more referential, it can move past a definite expression to the left edge Topic position. There is indeed evidence that this is possible. Consider the weak indefinite that we encountered earlier:

35. *njaan chilathu kandu*  
 I something saw  
 I saw something
36. ?/\**chilathu njaan kandu*

*chilathu* is infelicitous when it appears in a higher position than the definite subject. It is possible to make it more referential by making it partitive specific by adding the suffix *okke* to the indefinite, producing *chilathokke*, ‘some of the things’. Now the indefinite is able to move past the definite subject.

37. *chilathokke njaan kandu*  
 something.okke I saw  
 I saw some of the things.

Assuming that Wh words pattern with indefinites and hence the ban on Wh occurring at the left edge, the prediction is that making a Wh partitive specific should make it possible for the Wh to occupy the left edge. The prediction is borne out as we find the same results as in the case of indefinites where the element *okke* attaches to the Wh as contrasting the following example with example (4) will show.

38. *a:r-okke Rajane kandu?*  
 Who-all Rajan.Acc saw?  
 Which people saw Rajan?

Presupposition as in the case of ‘how many’ also is enough to topicalise a Wh to the left edge:

39. *ethra pe:r Rajane kandu?*  
 How many people Rajan.Acc saw?  
 How many people saw Rajan?

Tirumalesh (1996) has observed that a linguistic item displaced to the right edge of a clause is a Topic. For example, *Rajan* in the following sentence is a Topic.

40. avan            kandu,        Rajane .  
       he            saw            Rajan.Acc  
                   He saw Rajan.

'He' is the Topic in the following sentence even though it is in the sentence final position:

41. Rajane        kandu, avan  
       Rajan.Acc saw    he  
                   'He saw Rajan'

The proposal I made here would predict that a Wh should not be able to appear in this position. This prediction is borne out, a Wh cannot appear in this position:

42. \*avan        kandu,        a:re?  
       he            saw            Who.Acc  
                   Who did he see?  
 43. \*Rajane        kandu,        a:ru?  
       Rajan.Acc    saw            who  
                   Who saw Rajan?

We explore the *in situ* nature of bare Wh in Malayalam further in the next section.

### 5.3 Wh and Quantificational Force

In the examples below we can see that substituting the co-arguments with nominals of differing definiteness affects the positions where a bare Wh can appear.

44. Rajan    a:rkku    pu:chaye    koduthu?  
       Rajan    whom    cat.Acc    gave  
                   Whom did Rajan give (a) cat to?  
 45. \*Rajan    a:rkku    a: pu:chaye    koduthu?  
       Rajan    whom    that cat.Acc    gave  
                   Whom did Rajan give that cat to?  
 46. Rajan    a: pu:chaye    a:rkku koduthu?  
       Rajan    that cat.Acc    whom gave  
                   Whom did Rajan give that cat to?

Examining the examples above, we see in 44 that a Wh can appear in the canonical word order of S IO DO V when the subject is definite and the DO is generic. 45, where the DO is definite, the canonical word order results in ungrammaticality. In 46, the position of the IO and DO are inverted and the sentence is grammatical. This could be because the Wh moves to the right or the DO moves past the Wh to a higher position. The simplest explanation would be that the DO is definite in example (46), which makes it amenable to scrambling. The DO mandatorily moves past the Wh, making the Wh appear in the immediately preverbal position creating the illusion that the Wh has moved to the right. In brief, a definite expression mandatorily occupies a position higher than a bare Wh.

All these examples point to the fact that a bare Wh in Malayalam may not have the necessary quantificational force to undergo movement; it is in-situ in verb-final constructions. This can be further explored using intervention effects.

### 5.3.1 Scrambling

Intervention effects refer to the phenomenon where certain quantifiers, when appearing between an in-situ Wh and its licensing complementiser, produce ungrammaticality. This will be discussed in more detail in Chapter 6.

As has been noted in the literature, certain quantifiers can act as interveners (Hoji 1985, Beck 1996). A minimal pair is given below.

47. Rajan a:re kandu?  
 Rajan whom saw  
 Whom did Rajan see?
48. \*Rajan ma:tram a:re kandu?  
 Rajan only whom saw  
 Whom did only Rajan see?

Languages like Korean circumvent the intervention effects by scrambling the Wh to a position to the left of the intervener (example from Beck and Kim 1997, p.339).

49. \* Amuto muôs-ûl sa-chi anh-ass-ni?  
 anyone what.Acc buy-CHI not do-Past-Q  
 What did no one buy?

50. Muôs-ûl<sub>i</sub> amuto t<sub>i</sub> sa-chi anh-ass-ni?  
 whta.Acc anyone buy-CHI not do-Past-Q  
 ‘What did no one buy?’

In contrast, Malayalam does not offer any such options as 51 below shows.

51. \*a:re Rajan ma:tram kandu?  
 whom Rajan only saw  
 Whom did only Rajan see?

On the face of it, this may be explained away as due to the ungrammaticality of a Wh occurring in the sentence initial position. However, the following example shows that that is not the case.

52. \*Rajan pu:chaye ma:tram a:rkku koduthu?  
 Rajan cat.Acc only whom gave  
 Whom did Rajan give only (a) cat to?
53. \*Rajan a:rkku pu:chaye ma:tram koduthu?  
 Rajan whom cat.Acc only gave  
 Whom did Rajan give only (a) cat to?

This might come as a surprise because like Malayalam, Korean is an SOV language with a relatively free word order derived by scrambling. More over, Korean is a Wh in-situ language as well. Thus, the expectation would be that Malayalam would pattern with Korean and the intervention effect can be overcome by moving the Wh. However, unlike Malayalam examples we saw above, Wh phrases can optionally be scrambled in Korean, which makes a difference (examples from Beck and Kim 1997, p.339).

54. Suna-ka muôs-ûl sa-ss-ni?  
 Sun-Nom what-cc buy-Past-Q
55. Muôs-ûl<sub>i</sub> Suna-ka t<sub>i</sub> sa-ss-ni?  
 wht.Acc Suna-Nom buy-Past-Q  
 ‘What did Suna buy?’

As discussed in the backdrop of examples 44-46, the assumption that the Wh is indeed in-situ is substantiated by this contrast. In Malayalam, a bare Wh is incapable of moving, even optionally, to escape the intervener.



Recall from Chapter 4 that we analyzed the composition of a Wh word in Malayalam to be an open deictic component taking a  $\Phi$ P as its complement. Demirdache (1987), while discussing Salish nominal expressions, alludes to a possible correlation between deictically marked DPs and lack of quantificational force, strengthening our assumption above. If this is in the right track, we should be able to convert a Wh word into an element with quantificational force by adding a quantifier to it; and thereby enable it to escape an intervener.

### 5.3.2 Wh+suffix

It is possible to add the quantificational elements *ellaam* or *okke* (roughly translated as ‘all’) to a Wh word in Malayalam.

56. Rajan        a:reokke            kandu?  
       Rajan        whom together    saw  
       Whom all did Rajan see?

In this case, it is completely grammatical to have an otherwise intervener in the question:

57. a:reokke                    Rajan ma:thram    kandu?  
       whom together        Rajan only        saw  
       Whom all did only Rajan see?
58. Rajan        a:rkku ellaam        pu:chaye ma:tram    koduthu?  
       Rajan        who.Dat all        cat.Acc only        gave  
       Whom all did Rajan give only a cat?

Interestingly, the options where the Wh-all succeeds the quantifier are ill formed, similar to the Korean examples given earlier. In other words, induced with sufficient quantificational force, Malayalam patterns with Korean.

59. ??Rajan ma:thram        a:reokke            kandu?  
       Rajan only                whom all        saw  
       Whom all did only Rajan see?
60. ?/\*Rajan    pu:chaye ma:tram a:rkku ellaam        koduthu?  
       Rajan        cat.Acc only        who.Dat all        gave  
       Whom all did Rajan give only a cat?

Furthermore, the Wh gains more freedom in terms of scrambling, again similar to Korean, when occurring with a quantificational element:

61. Rajan a:re kandu?  
 Rajan whom saw  
 Whom did Rajan see?
62. Rajan a:reokke kandu?  
 Rajan whom together saw  
 Whom all did Rajan see?
63. \*a:re Rajan kandu?  
 who Rajan saw  
 Whom did Rajan see?
64. a:reokke Rajan kandu?  
 whom together Rajan saw  
 Whom all did only Rajan see?
65. Rajan a:rkkokke pu:chaye ma:tram koduthu?  
 Rajan who.Dat together cat.Acc only gave  
 Whom all did Rajan give only a cat?

The simplest assumption that suggests itself seems to be that the Wh in Malayalam is really *in situ* in its overt position in the sense that it does not *move* at any point in the derivation to be in a Spec-Head relation with C<sub>INT</sub> as is often proposed for Wh movement languages. Neither does the Wh seem to move covertly since it seems to lack the necessary quantificational force to move on its own. Intervention effects bear evidence to this.

The point can be further substantiated by examining the explicitly quantificational Wh phrase ‘how many’. As shown below, *ethra* is capable of appearing anywhere in the sentence as well as being able to circumvent intervention effects.

66. Rajan-nu ethra pe:r vote ceythu?  
 Rajan.Dat how many people vote did?  
 How many people voted for Rajan?
67. ethra pe:r Rajan-nu vote ceythu?  
 how many people Rajan.Dat vote did?  
 How many people voted for Rajan?

Thus, a quantificational ‘how many’ is perfectly grammatical appearing at the beginning of the sentence, providing evidence to the proposal that the Wh words that we have examined

so far lacks the necessary quantificational force<sup>37</sup>. A cursory examination of the interaction of 'how many' with an intervener shows that the Wh phrase *ethra pe:r* is able to circumvent intervention effects.

68. Rajan-nu ma:tram    ethra vote                    kitti?  
       Rajan.Dat                how many votes            got?  
       How many votes did Rajan alone get?
69. ethra pe:r                                    Rajan-nu ma:tram            vote ceythu?  
       how many people            Rajan.Dat only            vote did?  
       How many people voted only for Rajan?

Berman (1991) has argued that a Wh word signifies a variable, which needs to be bound by an operator. However, as we saw in Chapter 4, Malayalam Wh words are more like an open DP rather than a variable that can be used independently like the Wh words in Chinese. (We discussed this in chapter 4, section 4.7). Coupled with a lack of quantificational force, the Wh remains *in situ* in verb-final constructions.

#### 5.4 A Differing View: Jayaseelan (2001)

Jayaseelan (2001) has argued that the Wh phrases undergo obligatory movement to a Focus phrase at the left periphery of the vP in Malayalam. The paper examines interrogative constructions like the following (examples 1-4, p.40 in Jayaseelan 2001) where the canonical SOV order cannot be followed. For example, as shown in Jayaseelan (2001), the sentence where the Subject Wh appear before the object (example 70b below) is ungrammatical:

70. a. ninn-e aaru    aTiccu?  
       you.Acc    who    beat-past  
       `Who beat you?'
- b. \* aaru ninn-e aTiccu?
71. a. iwiTe aaru    uNTu?  
       here            who    is  
       `Who is here?'
- b. \* aaru iwiTe uNTu?

<sup>37</sup> Earlier, we briefly mentioned Demirdache (1987) to point out a plausible connection between a diectically marked DP and lack of quantificational force. This seems to be on the right track since *e-thra*, although it does have a diectic component, does not take a phi-complement like the other Wh words do. *ethra* modifies the nominal. In other words, this is in line with Wiltschko (2009) who shows that a diectic feature can be associated with a DP by modifying the phi/N phrase or by taking the saem as a complement. Malayalam Wh seems to show that this distinction could make a difference on the quantificational force of the DP.

72. a. awan ewiTe pooyi?  
 he where went  
 'Where did he go?'  
 b. \* ewiTe awan pooyi ?
73. a. nii aa pustakam aar-kku koDuttu?  
 you that book who.Dat gave  
 'To whom did you give that book?'  
 b. \* nii aar-kku aa pustakam koDuttu ?

Based on such data, Jayaseelan (2001) proposed that the Wh in Malayalam is not *in situ* as has been assumed; it undergoes mandatory movement to an IP internal Focus position at the left periphery of the vP.

A crucial piece of data in Jayaseelan (2001) is that a Subject Wh cannot appear in the SOV word order as we saw in 70 (a,b). Jayaseelan (2001) analyses this in terms of movement of Wh to a Foc phrase (cf. fig:1).

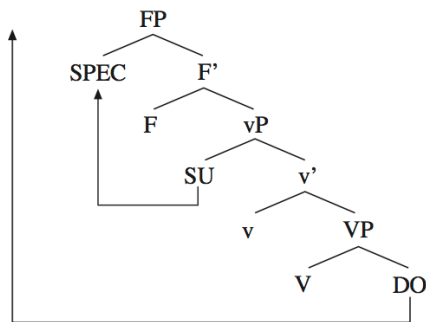


fig:1

Both Jayaseelan (2001) and the proposal in this thesis subscribe to movement of the definite object; unlike Jayaseelan (2001), I propose that a bare Wh is *in situ*, lacking quantificational force (fig: 2).

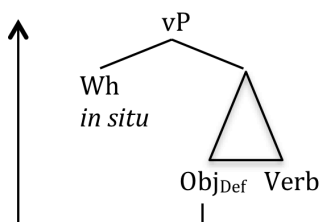


fig: 2

Appealing to the observation that “Many languages have a requirement that a question word should be contiguous to V” (p.39), Jayaseelan gives examples like the following:

74. a. *nii aa pustakam aar-kku koDuttu?*  
 you that book who.Dat gave  
 ‘To whom did you give that book?’  
 b. \**nii aar-kku aa pustakam koDuttu ?*

74 b is ungrammatical. However, a fact that is not considered in Jayaseelan (2001) is that, as we saw in the previous section, this ungrammaticality is a byproduct of the interaction between the bare Wh indefinite and the definite ‘that book’. Once we remove the demonstrative from the direct object nominal, 74 b becomes grammatical with the object nominal intervening between the bare Wh and the verb as shown in 75 a.

75. a. *nii aar-kku pustakam koDuttu?*  
 You whom book gave  
 Whom did you give (a) book to?  
 b. *nii pustakam aar-kku koDuttu?*  
 You (the) book whom gave  
 Whom did you give the book to?

I propose that the canonical S IO DO V order is grammatical by virtue of the fact that both IO and DO are indefinite expressions and they stay in-situ. As 75b shows, *pustakam* can appear before the bare Wh. However, note that in this sentence, the meaning we get is one where *pustakam* is interpreted as ‘the book’, substantiating the proposal.

We can see similar data in other places as well. Wh, when occurring with a quantificational element, need not be obligatorily *in situ* since the quantificational element imparts quantificational force to the Wh, making it amenable for movement. As a result, it can move to higher positions just like any definite expression. This can be explained using the following examples.

76. \**a:ru Rajane kandu?*  
 Who Rajan.Acc saw  
 Who saw Rajan?  
 77. \**a:re Rajan kandu?*  
 who Rajan saw  
 Whom did Rajan see?

The ungrammatical sentence in 76 can be derived in two ways: (i) the bare Wh indefinite expression rises beyond the already moved definite expression or (ii) both the definite and indefinite expressions remain in-situ. Both the derivations run afoul of the mainstream understanding of quantificational force of (in)definite expressions, and the ungrammaticality can be explained. The same holds true for 77; the indefinite Wh cannot rise past the definite Subject and hence the construction is ungrammatical. On the other hand, when the Wh is quantificational, there is no restriction on movement and we get the following grammatical examples.

78. a:rokke Rajane kandu?  
 Who all Rajan.Acc saw  
 Who all saw Rajan?
79. Rajan a:re kandu?  
 Rajan whom saw  
 Whom did Rajan see?
80. Rajan a:re okke kandu?  
 Rajan whom all saw  
 Whom all did Rajan see?
81. a:re okke Rajan kandu?  
 whom all Rajan saw  
 Whom all did only Rajan see?

As a counterpart to the examples where the Subject Wh could not precede the Object, example 81 shows that an Object Wh can move past the Subject resulting in OSV order when it gains sufficient quantificational force, even though the unmarked word order in Malayalam is SOV. Thus, it is the lack of quantificational force of a Wh rather than obligatory movement to a Foc position that affects the word order variations that we see.

Now, it can still be argued that the Wh still moves to a Foc position in 75 b; in 78 and 81 the LI under consideration is not a ‘real’ Wh or that Wh.*okke* should be treated differently. We can control for this by using a Wh that is inherently quantificational, namely, ‘how many’.

82. Rajan-nu ethra pe:r vote ceythu?  
 Rajan.Dat how many people vote did?  
 How many people voted for Rajan?

83. ethra pe:r                      Rajan-nu      vote ceythu?  
 How many people      Rajan.Dat      vote did?  
 How many people voted for Rajan?

As seen above, the interrogative ‘how many’ is amenable to movement and in example 83 it appears in a position that is above the object; the definite object intervening between the Wh and the verb. Furthermore, if the argument that Wh mandatorily occupies the vP-peripheral Focus position were right, then this would mean that nothing leaves the vP in Malayalam in this sentence.

Further more, one might have to propose some downward movement when it comes to Wh-adverbials like the following if one were to adhere dogmatically to the idea that all Wh need to be in the pre-verbal Foc position:

84. avan    enthinu              Rajane      ka:nanam?  
 He      what.for              Rajan.Acc    see.must?  
 Why should he meet Rajan?

‘Why’ is a high adverb (Cinque 1999), usually positioned above IP. In order to fulfill the argument that the Wh obligatorily occupies an IP-internal position, the Wh adverbial must undergo downward movement. Also, notice that unlike the examples that appear in Jayaseelan (2001), the Wh is not immediately preverbal<sup>38</sup>.

In fact, the Wh adverb appears in the same position as the corresponding non-Wh adverb, as following minimal pair shows:

85. avan    janal.il.koode                      Rajane              kandu.  
 he      window.Loc.through              Rajan.Acc              saw.  
 He saw Rajan through the window.  
 86. avan    engane      Rajane              kandu?  
 he      how              Rajan.Acc              saw.  
 How did he see Rajan?

---

<sup>38</sup> It is possible to argue that Wh adverbials and Arguments may exhibit different syntactic behaviour (see for eg. Reference). However, as the next set of data in the chapter shows, the point is actually that definite expressions rise past a bare Wh than the fact that it usually appears in the preverbal position.

This pattern is repeated in the following pair of sentences involving a temporal Wh adverb, showing additionally that there is more than one position where a Wh adverb can appear in an interrogative sentence:

87. avan eppo:l Rajane kandu?

he when Rajan.Acc saw?

When did he see Rajan?

88. avan Rajane eppo:l kandu?

he Rajan.Acc when saw?

When did he see Rajan?

89. \*eppo:l avan Rajane kandu?

Again, the position where the Wh appear in the above sentences are the same as the positions where a temporal adverb may appear; the main difference being, a temporal adverb can appear at the left edge of the matrix clause (being referential, they are amenable to being topicalised (Rizzi 2013)), whereas a Wh temporal adverb cannot; as a comparison of the examples in 87-89 with the examples below will show.

90. avan innale Rajane kandu.

he yesterday Rajan.Acc saw

He saw Rajan yesterday

91. avan Rajane innale kandu.

he Rajan.Acc yesterday saw.

He saw Rajan yesterday.

92. innale avan Rajane kandu.

Yesterday he Rajan.Acc saw

Yesterday, he saw Rajan.

Lastly, consider the following example where, in conjunction with an intervener, a construction where the Subject Wh has presumably moved to a vP-peripheral Focus position is still ungrammatical.

93. \*Rajanu pu:chaye ma:tram a:ru koduthu?

Rajan.Dat cat.Acc only who gave

Who give Rajan only a cat?

If the IP internal Focus position licenses a Wh in Malayalam, it is inexplicable why example 93 is ungrammatical – presumably the Wh is at its licensing position and thus nothing



should be able to intervene. In short, one can point out a slew of empirical facts that can challenge the assumption that Wh in Malayalam obligatorily moves to an immediately preverbal Focus position.

I would adhere to the proposal that a bare Wh (with the exception of 'how many') lacks quantificational force and is *in situ* in Malayalam in a verb-final construction.

### 5.5 The *aanu* Construction

On the other hand, an *aanu* construction demands that a Wh be in the C-domain. It will be shown below that a Wh in such a construction needs to be the Predication base for it to be grammatical; that is, all Wh base-generated inside the IP must be *ex-situ* in the *aanu* construction.

94. aare aanu Rajan kandathu?

Who be Rajan saw.Sg.N-

Who is it that Rajan saw?

95. \*Rajan aanu aare kandathu?

96. evide aanu Rajan po:yathu?

Where be Rajan went.Sg.N-

Where is it that Rajan went?

97. \*Rajan aanu evide po:yathu?

98. enthu aanu Rajan Priyaykku koduthathu?

What be Rajan Priya.Dat gave.Sg.N-

What is it that Rajan gave Priya?

99. \*Rajan aanu enthu Priyaykku koduthathu?

100. \*Priyaykku aanu Rajan enthu koduthathu?

### 5.6 Focus Movement?

As opposed to verb-final constructions, it might seem to be easier to argue that there is Focus-associated Wh movement in these constructions for the simple reason that many a literature assumes that these constructions are cleft constructions (see for example Asher and Kumari 1987, Jayaseelan 2001, Madhavan 1987 a.o.). However, as shown in Chapter 3,

section 3.2, it is not straightforwardly obvious that *aanu* exclusively manifests a Foc head in the C-domain.

Nevertheless, one can entertain the assumption hypothetically and explore the idea that the predication base marker *a:nu* may, in some cases spells out a Foc head. This would mean that whenever a Wh is the predication base, it is moving to a Foc projection. Now, whenever there is a Wh in the construction it has to move to the Focus/Predication base position, otherwise the sentence is ungrammatical. Not only that, the movement of the Wh is similar to the movement of a normal focused phrase (see chapter 6 for some crucial differences), be it extraction out of an embedded clause or pied piping of a Relative Clause with a Wh in it (focused item appears in bold).

101. a:re<sub>i</sub> a:nu      [ellavarum t<sub>i</sub>kandennu]Rajan      paranjathu?  
whom be            everyone            saw.Comp Rajan      said.SgN

‘Who is it that Rajan said that everyone saw?’

102. **Anup**<sub>i</sub> a:nu      [ellavarum t<sub>i</sub>kandennu]Rajan      paranjathu.  
Anup.Dat      be      everyone            saw.Comp Rajan      said.SgN

‘Anup is the one that Rajan said that everyone saw.’

When an element inside a Relative Clause is focused, the entire RelC needs to be pied piped to the Focus position.

103. [**Anup** ezhuthiya pusthakam] a:nu Rajan kandathu  
Anup wrote.Relativiser book      be      Rajan saw SgN

It is a book written by Anup that Rajan saw.

This is the same for a Wh inside a RelC as well.

104. [a:ru ezhuthiya pusthakam] a:nu Rajan kandathu?  
Who wrote.Relativiser book      be      Rajan saw SgN

A book written by whom did Rajan see?

Moving the Wh alone to the focus position results in ungrammaticality, just like extracting a focused element does.

105. \*a:ru<sub>i</sub> a:nu Rajan [t<sub>i</sub> ezhuthiya pusthakam] kandathu?  
Who be Rajan wrote.Relativiser book      saw SgN

A book written by whom did Rajan see?

106. \***Anup**<sub>i</sub> a:nu Rajan [t<sub>i</sub> ezhuthiya pusthakam] kandathu  
Anup be Rajan wrote.Relativiser book      saw SgN

It is a book written by Anup that Rajan saw.

Thus it seems that when there is an overtly manifested Focus position, the Wh undergoes obligatory movement to that position. There have been many semantic proposals regarding the connection between Wh and Focus. For example, Beck (2006) argues that Wh-questions are interpreted by the same mechanism as focus in order to explain the intervention effects.

On the syntactic front, Sabel (2000, 2002, 2003) attempted to tackle the issue by assuming that

“[...] the position of *wh*-words in *wh*-questions is universally determined by [Wh]- and [Focus]-features” (Sabel 2003, p.235).

Discussing the case of Malagasy with both Wh *in situ* and Wh *ex situ* constructions, along with the mention of a number of other languages that exhibit similar patterns w.r.t. question formation, Sabel shows that

“[...] checking of [+Focus]-features is involved if overt *wh*-movement takes place” (p.237).

In fact, this line of argument could appear to be substantiated in Malayalam. We saw earlier that extraction of a Wh from an embedded clause patterns with Focus movement. Crucially, this extraction is impossible in constructions where the matrix clause is verb-final. In the following example, the matrix clause is an *aanu* construction and provides a position to which the Wh in the embedded clause can be moved.

107. a:re<sub>i</sub> a:nu Rajan paranjathu [Anup t<sub>i</sub> kandennu]?  
 whom be Rajan said.SgN Anup saw.Comp  
 ‘Who is it that Rajan said that Anup saw?’

Now look at the verb-final counterpart. A declarative sentence is given below followed by the interrogative counterpart for explicatory purposes.

108. [Anup Meeraye kandennu]Rajan paranju  
 Anup Meera.Acc saw.Comp Rajan said  
 ‘Rajan said that Anup saw Meera.’
109. \*a:re<sub>i</sub> [Anup t<sub>i</sub> kandennu]Rajan paranju?  
 whom Anup saw.Comp Rajan said  
 ‘Who did Rajan say that Anup see?’
110. \*a:re<sub>i</sub> Rajan paranju [Anup t<sub>i</sub> kandennu]?  
 whom Rajan said Anup saw.Comp  
 ‘Who did Rajan say that Anup see?’

111. \* Rajan a:re<sub>i</sub> paranju [Anup t<sub>i</sub> kandennu]?  
 Rajan whom said Anup saw.Comp  
 Who did Rajan say that Anup see?
112. \* Rajan a:re<sub>i</sub> [Anup t<sub>i</sub> kandennu]paranju?  
 Rajan whom Anup saw.Comp said  
 Who did Rajan say that Anup see?

The only grammatical option is to leave the Wh as *in situ* as in the following example where depending on the intonation the Wh is interpreted as having matrix scope or narrow scope.

113. [Anup a:re kandennu]Rajan paranju  
 Anup whom saw.Comp Rajan said  
 Who did Rajan say that Anup saw?  
 Rajan said who Anup saw.

We had already seen that movement of a bare Wh is not a grammatical option in verb-final sentences. We see the same again with overt movement of Wh into the matrix clause here. Sabel (2003) has suggested “[...] checking of [+Focus]-features is involved if overt *wh*-movement takes place” (p.237). In an *aanu* construction we see overt Wh movement and *if* we take the *aanu* construction to be a Focus construction since all *aanu* sentences involve a Focus reading by definition (see Chapter 4), then it appears that Malayalam corroborates Sabel’s proposal. (See Boskovic (2002), Muriungi (2004), Horvath (1986) a.o. for similar arguments). The verb-final constructions show that, dovetailing with Sabel’s proposal, the Wh feature in Malayalam is not strong enough to obtain movement of a Wh whereas an overt Focus feature in *aanu* sentences forces Wh movement.

However, there are a couple of empirical points that need to be taken into account which points in the direction that the picture is more complex than a straightforward adaptation of Sabel (2002 et al.) might allow. The first point is that despite the similarities enumerated above, Wh movement, as we saw elsewhere in this chapter, is absolutely possible in verb-final constructions when the Wh has sufficient quantificational force to do so. That is, Wh movement may be constrained by factors other than overt Focus. While this does not contradict Sabel (2002) or similar proposals right away, it clearly shows that the Focus feature is only one of the features that can help a Wh to move. As a corollary, one would like to see when exactly a Focus feature can be of assistance in licensing a Wh. This leads us to different kinds of Focus discussed in the literature, where we encounter the second datum

that shows that only the purported Focus feature in an *aanu* construction allows the Wh to be moved to the focus position, thereby weakening the argument further.

### 5.7 Wh Movement in *aanu* Construction is Not Triggered by a Focus Feature

In Chapter 3 we saw that the *aanu* construction is not the only one that involve explicitly manifested Focus. There is a Contrastive Focus construction that encodes exhaustivity. We also saw that this contrastive focus demands a set of alternatives to operate upon. Recalling the semantic arguments like Beck (2006) and similar ones that attempt at a unification of Hamblin (1973) and Rooth (1992), the contrastive focus construction here with its obligatory need for a set of alternatives would be predicted to be ideal for obtaining interrogative readings. This, however, is not the case. Wh fares poorly in the context of contrastive focus; it is an intervener in the sense of Beck (2006).

114. \*John-e: a:re kand-ull-u:?

John-e: who.Acc saw-be-u:

'Only John saw who?'

115. \*a:re-e: John kandullu:?

Whom-e: John saw-be-u:?

'Only who did John see?'

More over, if we recall the syntactic arguments by Sabel (2003), Boskovic (2002) and others, here we have an overtly manifested Syntactic Focus feature that is incompatible with Wh let alone capable of inducing any Wh movement.

The next two points pertains directly to the structure and meaning of the *aanu* construction. The following example shows that there can be only one putative Focus position in an *aanu* sentence.

116. \*Rajan aanu Priyaye aanu kandathu

Rajan be Priya.Acc be saw.Sg.N.

However, in stark contrast to this, it is possible to have the following multiple question:

117. aaraa, aareyaa kande?

Who.be whom.be saw.Sg.N.

'Who saw whom?'

This is inexplicable if the movement of the Wh is the same as the putative Focus movement, since there cannot be two Focus positions in the clause. Not only the structure, but the meaning also is not in line with putative Focus movement when a Wh is involved. As we

saw in detail, the *aanu* construction encode exhaustivity, and consequently, it can be argued that the construction is an exhaustive focus construction. This means that it should not be possible for the sentence to have a ‘mention-some’ interpretation since the exhaustive focus constructions would demand an exhaustive set of elements to occupy the focus position. Hence, as Cable (2012) argues, if the Wh movement in these constructions is indeed Focus movement, then it should be impossible to use them in mention-some questions as in the following exemplary context:

*Context:* You are trying to design a menu for a child’s party. You have no idea what food children these days like, and would like to get some suggestions from a friend (from Cable 2013):

118. pille:rkk        enthaanu    kodukkunnathu?  
 children.Dat    what.be    give.Sg.N.  
 What is it that (we) can give the children?

Similar results were obtained vis-à-vis other mention-some questions<sup>39</sup> such as below:

*Context:* You are in a new place, and would like to buy a newspaper. The most natural way a Malayalam speaker from my region ask the question is by using a Type II sentence:

119. evideya:        oru pathram        kittunne?  
 Where.be        a paper            get.Sg.N.  
 Where is it that (one) can get a newspaper?

In short, it is not straightforward to assume that the Wh movement we see in the *aanu* construction in Malayalam is Focus movement. If one subscribes to Horvath (2010), it could be seen as brought about by an Operator rather than an overt Focus feature. However, the data presented here shows that it is not a general Exhaustive Identification Operator either. Either ways, it does not seem to be an interrogative feature/head/projection in the C-domain that makes the Wh move in an *aanu* construction since the Wh occupies the usual Predication Base position of a categorical construction.

Horvath (2007) employs the behavior of the focus sensitive particles *only* and *even* to diagnose focus induced movements. *Only* seems to undergo focus movement in Hungarian while *even* does not, giving rise to a contrast and calling for an explanation: if a focus feature is responsible for movement, then why a focus feature on certain items and not others? In Malayalam, phrases with these particles may or may not appear at the pre-*aanu* position.

---

<sup>39</sup> thanks to Julia Horvath (p.c.) for this example.

120. Priya a:nu Rajane mathram kandathu  
Priya be Rajan.Acc only saw.Sg.N.

'It is Priya who saw only Rajan'

121. Priya mathram a:nu Rajane kandathu  
Priya only be Rajan.Acc saw.Sg.N.

'It is only Priya who saw Rajan'

If a focus feature triggers movement to a focus position, then it is unclear as to why it is grammatical for *only* to appear in a non-focus position. And if we argue that a focus feature *might* trigger movement to a Focus position, then it is unclear as to why a Wh appearing anywhere other than the pre-*aanu* position results in ungrammaticality.

I will not go any deeper in this chapter into what causes the movement of the Wh in an *aanu* construction since this is the theme of Chapter 7. The important point for my purposes here in this chapter is that an *aanu* construction functions as a well-formed content question only when a Wh is the predication base; this movement is not equivalent to Focus movement.

## 5.8 Summary

This chapter provided data to show that a bare Wh phrase is *in situ* in a verb-final construction. Contrary to the proposal by Jayaseelan (2001), the Wh in a verb-final interrogative construction does not need to move obligatorily to an IP-internal Focus position; the overt movement of the Wh in a categorical construction is not to a position where it is licensed, as intervention effects reveal (see Chapter 6, section 6.5). More over, the empirical data points to a lack of quantificational force when it comes to a bare Wh word (except for 'how many') in Malayalam. Coupled with the similarities between Wh words and indefinites in the language, it seems prudent to attach some merit to the traditional assumption that Malayalam is a Wh *in situ* language in the sense that the Wh phrase does not, overtly or covertly, enter into a Spec-Head relation with a licensing C-head in a verb-final construction. On the other hand, a Wh generated inside the IP undergoes overt movement in *aanu* construction; a Wh has to be the Predication Base for an *aanu* construction to be a well-formed content question. In short, Wh is *in-situ* in verb-final constructions and *ex-situ* in the *aanu* construction.

## Chapter 6 Positioning the Wh

As Cheng (2009, p.767) puts it, “One of the most fascinating aspects of *wh*-in-situ is that the in-situ *wh*-items, though in-situ, can take wide scope, on a par with moved items.” Thus, in (2), the Wh word remains in the same position as its non-interrogative counterpart; yet the sentence is interpreted as a question.

1. Rajan Priyaye kandu.  
Rajan Priya.Acc saw  
Rajan saw Priya.
2. Rajan aare kandu?  
Rajan whom saw?  
Whom did Rajan see?

Not only that, the two types of languages – where a Wh can remain in-situ and where the Wh moves to C-domain – behave in the same manner vis-à-vis selectional restrictions.

3. Rajan wonders what Priya bought.
4. Rajan Priya enthu vaangi ennu aalochichu  
Rajan Priya what bought QC wondered  
Rajan wondered what Priya bought.
5. What did Rajan think Priya bought?
6. Rajan Priya enthu vaangi ennu vicharichu?  
Rajan Priya what bought QC thought  
What did Rajan think Priya bought?

3 and 4, regardless of the overt position of the Wh is interpreted as an indirect question while 5 and 6 are content questions.

There have been a number of proposals over the years to account for the range of data like the above that one encounters when looking at interrogative constructions. We briefly go through the most relevant ones for this thesis, keeping Malayalam data in mind.



One of the attempts in the early days to unify the differences in the overt position of the Wh in content questions was to suggest that the surface structure differences are only in the surface; at the LF, all languages are the same. The apparent in-situ effect is due to the fact that the Wh is a kind of quantifier that moved covertly to the same position as its overt counterpart in Wh movement languages. Section 6.1 describes this idea. However, it was soon found out that not all in-situ Wh languages employ the exact same mechanisms to produce the surface effect. For example, Chinese and Japanese, though both are in-situ Wh languages, were pointed out to be different in the modus operandi involved. Section 6.2 discusses this; the question particle was suggested to play an important role in yielding the kind of in-situ in these languages. This leads us to the recent proposal by Cable (2010) that a *Q* particle mediates the relation between a Wh and its licensing C-domain feature in *all* languages. Section 6.3 offers a description of this proposal and section 6.4 offers an examination of Malayalam data with the aim of figuring out the structure of the QP. It is suggested that Malayalam QPs are a result of a phonologically null *Q* taking a Wh containing phrase as its complement. The next section, 6.5, examines the QP in interrogative sentences to determine if there is covert movement. After investigating intervention effects in the language, it is concluded that there is no covert phrasal movement of QP to a licensing C head.

### 6.1 Wh as Quantifier

Looking at similar constructions in Chinese, Huang (1982, 2010) proposed a movement analysis for Chinese that was based on “the treatment of *wh*-words as a kind of quantifier” (2010, p.12). Huang gives the following examples (7-9) and their proposed logical forms (10-12):

7. [Zhangsan wen wo [shei mai-le shu]]  
Zhangsan ask me who boughtbooks  
'Zhangsan asked me who bought books'
8. [Zhangsan xiangxin [shei mai-le shu]]  
Zhangsan believe who boughtbooks  
'Who does Zhangsan believe bought books?'
9. [Zhangsan zhidao [shei mai-le shu]]  
Zhangsan know who boughtbooks
  - a. 'Who does Zhangsan know bought books?'
  - b. 'Zhangsan knows who bought books.'

10. [Zhangsan wen wo [shei<sub>x</sub> [x mai-le shu]]  
 Zhangsan ask me who bought books  
 ‘Zhangsan asked me for which x, x bought books’
11. [shei<sub>x</sub> [Zhangsan xiangxin [x mai-le shu]]]  
 who Zhangsan believe bought books  
 ‘For which x, Zhangsan believes x bought books?’
12. [Zhangsan zhidao [shei<sub>x</sub> [x mai-le shu]]]  
 Zhangsan know who bought books  
 ‘Zhangsan knows for which x, x bought books.’
13. [shei<sub>x</sub> [Zhangsan zhidao [x mai-le shu]]]  
 who Zhangsan know bought books  
 ‘For which x, Zhangsan knows x bought books?’

In other words, the proposal is that the Wh word undergoes movement at LF, similar to the overt movement of Wh in English. Furthermore, this implicates a *wh*-operator where “[...] the formal interpretation of a *wh*-operator involves singling out the feature [+WH] as the quantifier proper and leaving the leftover features of a *wh*-word in a predication indicating its extension.” (p.20), in the same way a quantifier phrase is proposed to undergo Quantifier Raising. This Wh-movement was situated in the GB framework as a covert version of Move- $\alpha$ .

This covert version of Move- $\alpha$  was theorized to be free from certain constraints of the overt version in that islands did not seem to matter to in-situ argument Wh phrases as shown below (example from Aoun and Li 1993a):

14. Ta yinwei ni shuo shenmehua hen shengqi?  
 He because you say what word very angry  
 ‘What (x) such that he was angry because you said x words?’

It was argued that although covert movement was subject to Empty Category Principle (ECP), it did not obey Subjacency. This view was thought to be undesirable by many since it imposed different rules for covert and overt operations whereas the optimal scenario would be a single set of rules that any movement operation has to obey. This discontent found theoretical expression in the suggestion that the violation of Subjacency was an apparent phenomenon that masked the large-scale pied-piping of the entire island at LF (cf. Nishigauchi 1986, Pesetsky 1987a a.o.).

While these analyses attempted to derive the relation between a Wh in-situ and a licensing Comp by phrasal or category movement, other proposals argued for feature movement based accounts. Although not the first in this category, Pesetsky (2000) who proposed that at least some Wh in-situ actually involve feature movement rather than phrasal movement turned out to be an influential one. Japanese, according to him, employed feature movement while Chinese was conjectured to possibly have covert phrasal movement. According to Pesetsky, intervention effects pointed to feature movement.

This approach, thus, attempted to account for the differences between Chinese and Japanese.

## 6.2 Chinese is not Japanese.

Despite both being in-situ languages, Chinese and Japanese differ in some aspects like Wh-islands and Intervention effects. While Chinese in-situ Wh phrases do not obey Wh-island constraint, Japanese yields Deviant constructions under the same conditions. Aoun and Li (1993b) addresses the question directly in the squib “On Some Differences Between Chinese and Japanese Wh-elements” and focuses on Intervention effects, summarizing the facts in the following table (p.367). QP stands for quantificational phrase, and QP/QP shows the surface order, in this case, a QP followed linearly by another QP. Thus, (a) in the table shows that when there are two QPs in the clause, the first one takes scope over the second one, a phenomenon usually dubbed as surface scope where the scope relations respect the surface linear order of the scope taking elements in a clause. Surface scope is respected by both Japanese and Chinese in (a) in the table below, as indicated by the comment “no crossing”. However, when we come to (b) where a QP interacts with a Wh, we get different results for Chinese and Japanese.

	Chinese	Japanese
(a) QP/QP	no crossing	no crossing
(b) QP/Wh	crossing OK	no crossing
(c) Wh/QP	no crossing	no crossing
(d) Wh/Wh	crossing OK	no crossing

As can be seen from the table, Chinese shows no intervention effects whereas the grammaticality of Japanese Wh is bound by the overt hierarchical position. Aoun and Li (1993a) surmised from the absence of intervention effects and the absence of Wh-island

effect that in-situ Wh in Chinese is not licensed by movement. Rather, they argued, Wh in Chinese employs unselective binding (a la Heim 1982). Tsai (1994) developed the idea further and suggested that while the unselective binders are generated at the clausal level in Chinese, they are generated at the DP level in Japanese. Thus, the operator-variable relation is immune to blocking in Chinese since it is not created by movement. Aoun and Li (1993b) explores the idea of binders generated at different positions and gives the following diagnostic table (p.371).

	Chinese	Japanese
(a) A <i>wh</i> -element can cross and have scope over a c-commanding QP	Yes	No
(b) Head-internal Relative Clauses occur	No	Yes
(c) Morphologically, particles are attached to <i>wh</i> -elements to form quantificational elements	No	Yes
(d) Quantifier floating occurs	No	Yes

These differences in the morphological behavior of the Wh words, they argued, reflect a difference in the way the quantificational system in the language is organized. Facts like the above tell one where the language in question generates the operators that bind the variable; whether the binders are base generated alongside the variable (Japanese) or base generated in a clausal position (Chinese).

In the same vein, Watanabe (1992) proposed that there is overt movement in Japanese, in the sense that a phonologically invisible operator undergoes overt movement. This line of analysis was taken another step forward with Hagstrom (1998) who, on the basis of data from Sinhala and Japanese among other languages, proposed that the question particle in these languages originates next to the Wh and moves to higher positions in the clause. In the same vein, Kishimoto (2005) argued that “[...] that it is Q-movement, rather than movement of a *wh*-phrase which is used to form an operator-variable structure in a *wh*-question, and that a Q-element, while delimiting a *wh*-constituent in its Merge position, serves as an operator that assigns scope to its host *wh*-in-situ.” (p. 2).

All the proposals discussed above work their way around the idea that for a Wh to be functional, it has to form an operator-variable association. Languages seem to be varying as to how they form this association. However, alongside these proposals, there have been

proposals that suggested that some of the Wh in-situ is licensed by feature movement rather than phrasal movement of any sort. Pesetsky (2000) has argued that while some Wh in-situ involves covert phrasal movement, there exist instances of in-situ Wh that are licensed via feature movement. He establishes this claim through a set of data involving Antecedent Contained Deletion and D-linked phrases. The presence of Intervention Effects also is put forward as a diagnostic tool for feature movement. Cheng and Rooryck (2000) also have used Intervention effects as a tool to detect feature movement in French. Following up on a proposal by Takahashi (1997), Nakamura (2002) has argued that null operator movement can be analyzed as feature movement.

Thus, there seems to be two strands of arguments – one pertaining to the idea of the need for a ‘logical variable’ for question interpretation and the other based on the need for an un/interpretable feature i.e., a ‘syntactic variable’ to enter into a relation with its counterpart.

As Bayer (2005, p.377) explains it,

“ The wh-phrase is semantically an operator which binds the trace, which in turn is interpreted like a logical variable. [...] Once the operator is in Spec, CP, it has scope over the proposition expressed by the IP. The proposition contains a trace, and is thus an ‘open’ position. [...] Strictly speaking, the feature [wh] is not itself an operator that could bind a variable. According to standard assumptions, the *wh*-phrase also involves an existential operator. This operator is actually responsible for variable binding.”

This leaves us with two relations, which are not very often teased apart in the literature. First, we have the Wh feature part, which, needs to enter into a licensing relation with a C-head; and second, the scope taking part of a Wh, which, logically speaking, depends on the operator part of it. For example, Chomsky (2000) proposes that there is an interpretable Q feature  $iQ$  on the Wh which enters into an Agree relation with an uninterpretable feature  $uQ$  on C, effecting convergence of the derivation. An EPP feature on C may demand that the Agree-d element be displaced to C, thus providing an account for Wh movement.

On the other hand, Aoun and Li (1993b), who investigated the differences between Chinese and Japanese vis-à-vis intervention effects noticed certain other differences as well, which they considered as related and attempted to derive all these differences from the way the operator part and the Wh-Restrictor part interacted.

Cheng (1991) seems to weave together these two strands and argues that the movement of a question particle and the movement of a Wh in English type languages basically achieve the same goal of ‘typing’ the clause as interrogative. However, there are languages where the Wh words, by virtue of their morphology, are in need of licensing and these are instances where multiple Wh-fronting occurs. Continuing on this theme, Brandner (2000) has argued that partial Wh movement as a scope marking strategy in German could be seen as a clause-typing operation. In other words, what Cheng argues for could be rephrased into the two themes that we saw run through the major proposal regarding Wh – the logical variable that deals with issues of scope and the syntactic variable that deals with the narrow syntactic properties.

As pointed out in the beginning, the core question that many found interesting is the same: how does an interrogative sentence indicate scope? Huang’s answer was to move – overtly or covertly – the Wh to the scope taking position. Others thought it unnecessary to move the entire Wh to the scope taking position since scope-taking or the operator-ness was deemed as only one part of the Wh phrase. Cheng (1991) proposes that either a Wh word or a question particle need to move to C to indicate that it is an interrogative construction – in other words, to indicate the scope of the Wh.

### 6.3 Cable (2010)

Such analyses stumbled on the issue that has generally come to be known as Pied-piping: where a phrase containing a Wh is moved instead of the Wh alone. “Pied-piping occurs when an operation that targets the features of a lexical item L applies to a phrase properly containing LMAX” (Cable 2010 p.6) as in the following question where instead of just the Wh Whose, the phrase whose mother is fronted.

15. [Whose mother] did you meet?

The question is why would additional lexical items be moved along with the lexical item that contains the relevant feature.

Cable (2010) put forward an explanation for this puzzle by arguing that it is not a feature on the Wh that undergoes Agree with the C, thus rendering the issue moot. The relation between the Wh and C, in Cable’s analysis, is Wh-externally mediated through a question

particle Q and it is this Q Phrase that ends up being displaced. Tlingit is the language he uses mainly to describe this analysis.

Interrogative sentences in Tlingit show Wh fronting, and overtly manifest a question particle:

16. Daa sá i éesh al'óon?  
 What Q your father he.hunts.it  
 What is your father hunting?

(Cable 2010 p.13)

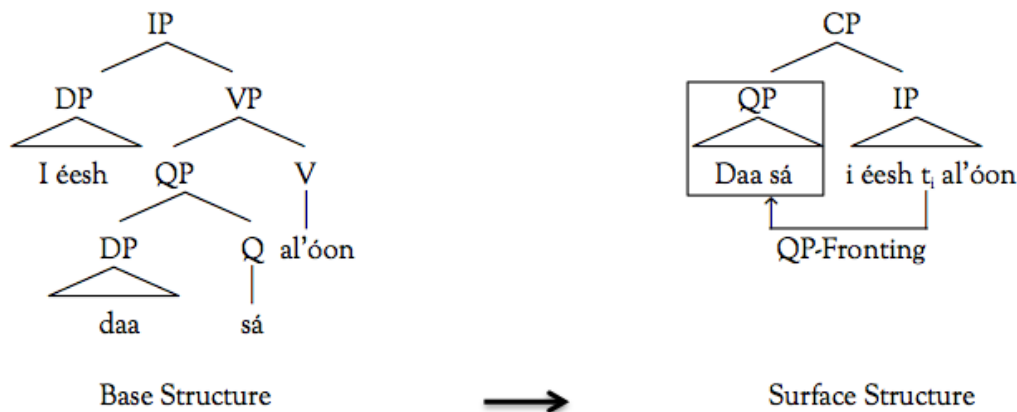


Fig:1

He further draws data from Japanese and Sinhala, two languages with overt question particles, to extend as well as substantiate this proposal. In both Sinhala and Japanese, the Wh word could be shown to be *in-situ* with overt question particles. Interestingly, the possible overt positions in which the Q particle can appear in these two languages differ systematically.

In Sinhala, the question particle *Da* cannot appear at the right edge of a matrix clause when the verb ends in *-e* although *Da* can appear at the right edge of a subordinate clause:

17. Chitra monawa da gatte?  
 Chitra what Q buy  
 What did Chitra buy?

(Cable 2010, p.87)

18. \*Chitra monawa gatta da?  
 19. Ranjit [kauru aawa kiyala]da danne?  
 Ranjit who came that Q know  
 Who does Ranjit know came?





or Sinhala, albeit a phonologically null Q. Thus we get the following typology of languages<sup>40</sup> (Cable 2010 p.103):

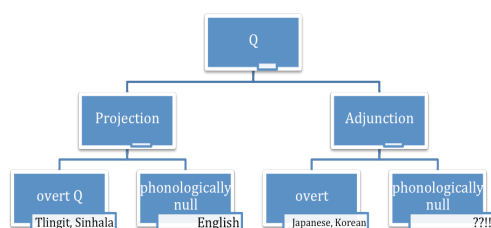
Language	Movement of Q- projections: Covert/Overt	Q-particle Takes Sister Complement: Yes/No	Phonology of Q- particle: Null/Pronounced
English	Overt	Yes	Null
Tlingit	Overt	Yes	Pronounced
Sinhala	Covert	Yes	Pronounced
Japanese	Overt	No	Pronounced

Cable (2010) concludes that

“[...] in no language – not even English – do wh-words bear a direct syntactic relationship with interrogative C [...]. Rather, in all languages, interrogative C probes and Agrees with the Q-particles accompanying the wh-words [...].” (p. 102).

Thus, for Cable 2010, the relation between a Wh and an interrogative C is *always* mediated through Q whenever there is such a relationship. Of course, this presents us also with the possibility of languages where no such syntactic relation exists between a Wh and an interrogative C. Cable addresses this by proposing a type of languages, Japanese being the prime example, where the Q is not in Agree with the Wh, but only semantics holding them together in an s-selectional relation. Thus Japanese makes it clear that the Wh can and do exist without entering into a direct syntactic Agree relation with an interrogative C. Given the more nuanced classification of languages on the basis of the interaction between the three elements we have been talking about so far – C, Wh feature, and Q – it is time now to see where does Malayalam belong to in the scheme of Cable (2010).

<sup>40</sup>Interestingly, there is another typology that Cable does not entertain here. If we divide languages into two Q-projecting versus Q-adjoining branches, we get the following tree:



This gives rise to the interesting theoretical possibility of a language with an adjoined phonologically null Q particle. Cable (2007) suggests that Tibetan might be such a language.

## 6.4 In search of the Q

As the reader might have already observed in the data above, Malayalam does not have an overt question particle like Tlingit or Japanese. Also, we have already seen that the Wh need not undergo mandatory overt movement in these sentences. So following Cable's logic, we can see the following possibilities for Malayalam:

- (i) Malayalam has a null Q that adjoins to the relevant phrase
- (ii) A null Q takes the relevant phrase as a complement

As we saw, the Wh is in-situ in a Verb-final construction. However, in an *aanu* construction, Wh needs to be ex-situ and this arms us with a vantage point from which we can explore the nature of the relation between a null Q and the phrase containing the Wh. It will be shown that extraction of a Wh out of a larger phrase like a Relative Clause that contains it is not possible in Malayalam; the entire Wh-containing phrase need to be pied-piped. This, in Cable's scheme of things, leads us to an analysis where the null Q takes the Wh-containing phrase as its complement. We begin below with morphology and then go on to an examination of island effects to show that the Q does not necessarily take just the Wh as its complement, but larger phrases that contain the relevant Wh can be complements to a Q.

### 6.4.1 Morphology

Sinhala questions, apart from having a question particle, also exhibit special morphology on the verb. Verbs in neutral declarative sentences end in –A while interrogative sentences end in –E, exhibiting 'particle-predicate concord' (Kishimoto 2005):

21. *chitra monawe de gatte*  
 Chitra what Q bought.E  
 What did Chitra buy?
22. *chitra pota gatta*  
 Chitra book bought.A  
 Chitra bought the book.

In Japanese, there is no such overt morphology on the verb that distinguishes Interrogative sentences from Declarative sentences<sup>41</sup>.

23. *Taro-ga hon-o yon-da*  
 Taro-nom book.Acc read-past  
 Taro read a book

---

<sup>41</sup> Data: Kaori Takamine, p.c.

24. dare-ga hon-o yon-da no?  
 who-nom book.Acc read-past Q  
 Who read a book?
25. dare-ga sono hon-o yon-da no?  
 who-nom that book.Acc read-past Q  
 Who read the book?
26. Taro-ga nani-o yon-da no?  
 Taro-nom what.Acc read Q  
 what did Taro read?

However, the question particle appears in clause final position in Japanese in contrast with Sinhala where the question particle appearing in the clause final positions in direct questions is fairly restricted (Kishimoto 2005).

Malayalam Interrogative sentences do not have overt question particles or special morphology. Questions are formed with the same linear order and the same verbal morphology as a declarative sentence, as discussed above. Although the Wh word in Malayalam can act as the base for making indefinite pronouns similar to Sinhala and Japanese, direct questions do not manifest any overt morphology on the Wh word or on the verb whereas an absence of the overt question particle renders the interrogative sentences ungrammatical in both Japanese and Sinhala.

Cable proposes that every language does have a Q particle, overt or covert. This means that even in covert cases like Malayalam, one should be able to figure out the position of Q by looking at its effects. Islands is an area that comes handy in this regard because if the attachment site of the Q is inside the Island, the relation between C<sub>INT</sub> and QP would be blocked, resulting in ungrammaticality. This could lead to a need to extract the Wh out of the island. On the other hand, if the Q attaches to the periphery of the island, the QP would be visible to the C<sub>INT</sub>, obliterating potential island effects.

#### 6.4.2 *Island Effects: Tool for Identifying the Attachment Site of Q*

Like many Wh in-situ languages, Malayalam shows insensitivity towards certain islands such as Relative Clauses. Relative clauses are islands for overt extraction of elements from within them as can be seen in the example below. A sentence with a RelC in the object position is given in 27.

27. Rajan      [Priya varacha    padam]    kandu  
 Rajan      Priya    drew-Rel    picture    saw  
 Rajan saw the picture that Priya drew.

An attempt to displace 'Priya' to the Topic position, extracting it from the RelC results in ungrammaticality:

28. \*Priya<sub>i</sub>    Rajan      [t<sub>i</sub> varacha    padam]    kandu  
 Priya      Rajan            drew-A    picture    saw  
 Rajan saw the picture that Priya drew.

This is not because of a distinctness condition forbidding two nominals with the same case marking from appearing next to each other (a la Richards 2001). It is evident from 27 that such a condition does not affect the sentence when the subject of the matrix clause and the nominative NP inside the RelC are linearly adjacent in the surface structure. We can see another example below where the two nominal that appear adjacent are case marked differently.

29. Rajanu    [Priya varacha    padam]    ishtappettu  
 Rajan.Dat    Priya    drew-A    picture    liked  
 Rajan liked the picture that Priya drew.

Even in this case extraction out of a RelC is ungrammatical.

30. \*Priya<sub>i</sub>    Rajanu    [t<sub>i</sub> varacha    padam]    ishtappettu  
 Priya            Rajan.Dat    drew-A    picture    liked  
 Rajan liked the picture that Priya drew.

Extraction of a Wh is ungrammatical as well:

31. \*a:ru<sub>i</sub>    Rajan      [t<sub>i</sub>    varacha    padam]    kandu?  
 who    Rajan            drew-A    picture    saw?  
 'Who is X such that Rajan saw a picture that X drew?'  
 32. \*a:ru<sub>i</sub>      Rajanu    [t<sub>i</sub> varacha    padam]    ishtappettu  
 who      Rajan.Dat    drew-A    picture    liked  
 'Who is X such that Rajan liked the picture that X drew?'

However, Wh inside the RelC receives a wide scope interpretation:

33. Rajan      [a:ru    varacha    padam]    kandu?  
 Rajan      who      drew-A    picture    saw?  
 Lit: Rajan saw picture that who drew?  
 'Who is X such that Rajan saw a picture that X drew?'

This is not because of [-Specific] nature of the Wh since making the Wh partitive does not improve its chances of extraction:

34. \*a:rokke<sub>i</sub> Rajanu [ t<sub>i</sub> varacha padam ] ishtappettu  
 who Rajan.Dat drew-A picture liked  
 ‘Who are the set S of people such that Rajan liked the picture that S drew?’

Different case marking added to partitivity-inducing suffix also does not work:

35. \*a:reyokke<sub>i</sub> Rajanu [ t<sub>i</sub> varacha kuttiye ] ishtappettu?  
 Who.Acc Rajan.Dat drew-A child.Acc liked  
 ‘Who are the set S of people such that Rajan liked the child who drew S?’

Thus the only means to get a wide scope reading out of a Wh inside a RelC is to leave it inside.

In languages with overt Q, there are clear restrictions on the attachment site for obtaining wide scope for the Wh it is associated with. For example, in Tlingit, “a wh-question may contain a wh-word inside a Relative Clause island, as long as the Q-particle is located outside of the island”. (Cable 2010, p.8)

36. [ [Waa kwlige<sub>yi</sub> CP ] xaat NP ] sa i tuwaa sigoo?  
 How it.is.big.Rel fish Q your spirit it.is.glad  
 ‘How big a fish do you want?’  
 (A fish that is how big do you want?) (Cable 2010, p.7)

It is the locality of the question particle *sa* that determines the scope of the Wh inside the Relative clause and consequently, if the Q is inside the Relative Clause, the Wh loses wide scope interpretation. Similar patterns are observed in Sinhala and Japanese as well.

37. oyaa [ Chitra kaa-te dunna pota ] da kieuwe?  
 You Chitra who.Dat gave book Q read-E  
 ‘You read the book that Chitra gave to whom?’ (Kishimoto 1992)
38. John-wa [ nani-o katta hito ]-o sagasite iru no?  
 John-TOP what.Acc bought person.Acc looking-for Q  
 ‘What is John looking for the person who bought?’ (Cheng 2003, eg. 43b)

In Sinhala, the Q immediately follows the Relative Clause, just like Tlingit. The Japanese example shows the Q at the end of the matrix clause<sup>42</sup> – again, outside the Relative Clause

<sup>42</sup> The clause final position of the Q in Japanese is argued to be a result of movement where the base position is argued to be similar to that of the Sinhala and Tlingit examples, next to the Relative Clause (see Hagstrom 1989, Cable 2010).

that contains the Wh. In both these languages, the Wh loses wide scope if the Q is placed inside the Relative Clause.

As we saw above, Malayalam Relative Clauses are not islands when it comes to wide scope interpretation for a Wh contained inside a Relative clause. Following from the behavior of the Q where it is overtly manifested, we can safely propose that the null Q in Malayalam must have its attachment site outside the Relative Clause. In other words, the purported null Q need not attach to the Wh directly<sup>43</sup>.

However, this still leaves another important question: What is the nature of the relation between the purported null Q and the Relative Clause that contains the Wh? Does it take the Relative Clause as a complement or is it an adjunction relation? Of course, it might be a little strange to say that there is a null Q adjoined to the Relative Clause in Malayalam. Luckily, we do not have to take recourse to an argument based on the beauty of the proposal; we do have a construction type that involves mandatory movement of phrases.

#### 6. 4.3 *The Nature of the Relation Between Q and Wh*

So far we have examined the behavior of Wh only in Verb-final constructions where they can be in-situ. In contrast, an *aanu* construction exhibit mandatory movement of the Wh to a Focus position.

39. a:ru a:nu Rajane kandathu?  
 Who be Rajan.Acc saw.Sg.N  
 ‘Who is X such that X saw Rajan?’

Constructions with a Wh that is not at the Focus position are ungrammatical.

40. \*Rajane a:nu a:ru kandathu?  
 Rajan.Acc be who saw.Sg.N  
 ‘Who is X such that X saw Rajan?’

This pertains to all Wh words in the construction, regardless of argument/adjunct division.

41. a:re a:nu Rajan kandathu?  
 Who.Acc be Rajan saw.Sg.N  
 ‘Who is X such that Rajan saw X?’

---

<sup>43</sup> I do not want to commit to the idea that the Q cannot attach directly to a Wh at all for reasons that will become clear later.

42. eppo:l a:nu Rajane Priya kandathu?  
 When be Rajan.Acc Priya saw.Sg.N  
 ‘When did Priya saw Rajan?’

43. engane a:nu Priya Rajane kandathu?  
 How be Priya Rajan.Acc saw.Sg.N  
 ‘How did Priya saw Rajan?’

When it comes to Wh contained inside islands, the entire island is moved to the focus position.

44. [a:ru ezhuthiya pusthakam] a:nu Rajan kandathu?  
 Who wrote.Rel book be Rajan saw.Sg.N  
 ‘Who is X such that Rajan saw a book written by X?’

Extracting the Wh out of the island and moving it alone to the Focus position results in ungrammaticality.

45. \*a:ru<sub>i</sub> a:nu [t<sub>i</sub> ezhuthiya pusthakam] Rajan kandathu?  
 Who be wrote.Rel book Rajan saw.Sg.N  
 ‘Who is X such that Rajan saw a book written by X?’

This would not have happened if the null Q in Malayalam simply adjoins to the Relative Clause as in Japanese. The movement of QP here involves movement of the entire Relative Clause which is possible only if the Q takes the Relative Clause as its sister. Similar effects are obtained in adpositional constructions as well.

46. [a:re-kkuricchu] a:nu Rajan paranjathu?  
 Who.Acc-about be Rajan said.Sg.N  
 ‘Who is X such that Rajan talked about X?’

47. \*a:re<sub>i</sub> a:nu [t<sub>i</sub> kuricchu] Rajan paranjathu?  
 Who.Acc be about Rajan said.Sg.N  
 ‘Who is X such that Rajan talked about X?’

Thus, a QP in Malayalam is a result of the null Q particle taking the relevant Wh-phrase as its complement. To give an example, the QP involved in the example (44) above could be represented as below:

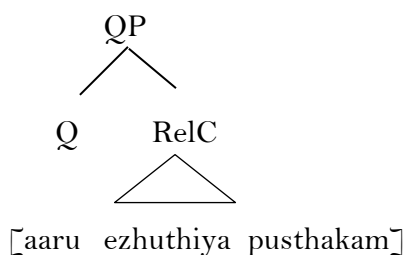
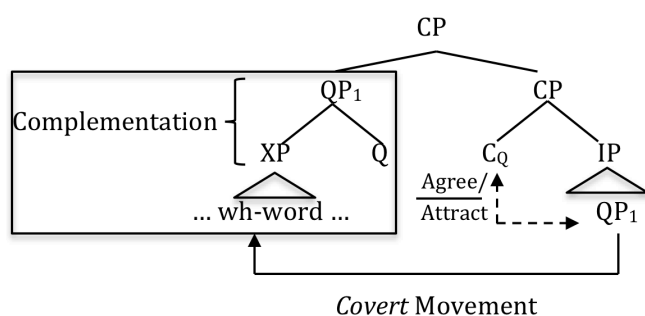


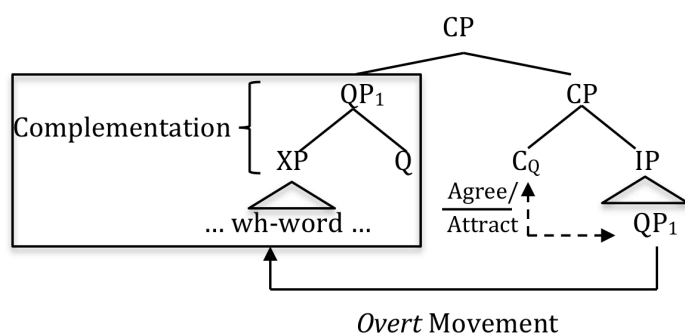
Fig:3

Now, if we are to take a universalist position for the relation between a null  $Q$  and the Wh phrase, the optimal option is to say that the  $Q$  takes the Wh Phrase as its complement in Verb-final as well as *aanu* constructions. Cable (2010) does not offer any alternative proposals about movement of Wh phrases; his contribution pertaining exclusively to what is being moved. Hence, covert movement as explicated in traditional analyses of Wh *in-situ* that involve covert movement of the Wh phrase are perfectly fine options for Cable. Thus, following the logic in cable (2010), we get the following structure for Malayalam (Cable 2010 p.85,86):

QP in Verb-final constructions



QP in *aanu* construction



However, as we will see in the next section, this does not seem to be the case for Malayalam. Intervention Effects will be explored in the next section to show that there is no covert phrasal movement. Furthermore, despite being able to generate the  $Q$  away from the Wh word, Malayalam still does not have the option of base generating the  $Q$  at C like Chinese. Again, intervention effects come handy in establishing this.

## 6.5 Intervention Effects

Hoji (1985) noticed that a scope-bearing element appearing between a single Wh and a Complementiser that licenses it produces Deviant constructions in Japanese. Beck and Kim (1996) explored such effects in detail for Korean. It is well-known since then that the





Rajan Anup.Dat saw. be<sub>Neg</sub>

Rajan did not see Anup.

53. \*Rajan a:re kandilla?

Rajan whom saw. be<sub>Neg</sub>

Whom did Rajan not see?

We saw in the Korean examples above that moving a Wh past an intervener removes the intervention effect. Since a bare Wh in Malayalam is *in-situ* and resists movement, moving the Wh past an intervener is not a strategy available in the language. This is shown below w.r.t. the particles *even*, *also*, and *only*.

54. \*Rajan ma:tram a:re kandu?

Rajan only whom saw

Whom did only Rajan see?

55. \*Rajan po:lum a:re kandu?

Rajan even whom saw

Whom did even Rajan see?

56. \*Rajanum a:re kandu?

Rajan also whom saw

Whom did Rajan also see?

57. \*a:re Rajan ma:tram kandu?

whom Rajan only saw

Whom did only Rajan see?

58. \*a:re Rajan polum kandu?

whom Rajan even saw

Whom did even Rajan see?

59. \*a:re Rajanum kandu?

whom Rajan also saw

Whom did Rajan also see?

Adverbial quantifiers like *mikkava:rum* (often) and *eppo:zhum* (always) cause intervention effects.

60. \*Anup mikkava:rum/eppo:zhum a:re ka:na:rundu?

Anup often/always who see.habitual.be

Who does Anup usually see?

As for nominal quantifiers, strong nominal quantifiers do not act as interveners while weak quantifiers do.

61. Rajan      Anupinu      samma:nam      koduthu  
       Rajan      Anup.Dat      prize            gave  
       Rajan gave a prize to Anup
62. Rajan      cila kuttikalkku      samma:nam      koduthu  
       Rajan      some children.Dat      prize            gave  
       Rajan gave prizes to some children
63. Rajan      aupinu      enthu      koduthu?  
       Rajan      Anup.Dat      what      gave?  
       What did Rajan give Anup?
64. \*Rajan      cila kuttikalkku      enthu      koduthu?  
       Rajan      some children.Dat      what            gave  
       Hat did Rajan give to some children?

A sentence with *some children* is fine (62), as is a sentence with a Wh in it (63). When they co-occur, the sentence is ungrammatical (64). Co-occurrence of a strong quantifier like *everyone* with a Wh does not result in ungrammaticality (65-66).

65. Rajan      ella:varkkum      samma:nam      koduthu.  
       Rajan      everyone.Dat      prize            gave  
       Rajan gave a prize to everyone
66. Rajan      ella:varkkum      enthu      koduthu?  
       Rajan      everyone.Dat      what      gave  
       What did Rajan give everyone?

In short, we obtain intervention effects in in-situ Wh constructions, showing that there is no covert phrasal movement. This can be contrasted with Chinese, a language which is immune to intervention effects. It has been argued for Chinese that the Q is base generated in the C position (Aoun and Li 1993b). That is, even though it is possible for Malayalam to merge the Q to a larger phrase like a Relative Clause that contains a Wh, it cannot merge the Q directly to the C-domain in a content question.

6.5.2 *aanu* Construction

It was shown in Chapter 3 that the predication base in an *aanu* construction encodes Exhaustivity. This makes it unsuitable for particles like *even* and *also* to appear in the Focus position of *aanu* construction since these particles presupposes the existence of elements for which the proposition in the predicate holds true, but not included in the set of elements of the focused set. That is, particles like *even* and *only* contradict the Exhaustive interpretation and are ungrammatical at the Exhaustive position of the *aanu* construction. On the other hand, the particle *only* is amenable to Exhaustive interpretation and is fine in the predication base position. As É. Kiss (1998) points out, a universal quantifier appearing at the predication base position also makes an *aanu* construction with Exhaustive reading ungrammatical.

67. *Anup ma:tram* a:nu Rajane kandathu  
 Anup only be Rajan.Acc saw.Sg.N  
 It is only Anup who saw Rajan.

68. \**Anup po:lum* a:nu Rajane kandathu  
 Anup even be Rajan.Acc saw.Sg.N  
 It is even Anup who saw Rajan.

69. \**Anupum* a:nu Rajane kandathu  
 Anup also be Rajan.Acc saw SgN  
 It is Anup also who saw Rajan.

70. \**ella:varum* a:nu Rajane kandathu  
 Everyone be Rajan.Acc saw SgN  
 It is everyone who saw Rajan.

These elements are OK in other positions, as shown below.

71. Rajane a:nu *Anup ma:tram* kandathu  
 Rajan.Acc be Anup only saw SgN  
 It is Rajan who only Anup saw.

72. Rajane a:nu *Anup po:lum* kandathu  
 Rajan.Acc be Anup even saw SgN  
 It is Rajan who even Anup saw.

73. Rajane a:nu *Anupum* kandathu  
 Rajan.Acc be Anup also saw SgN  
 It is Rajan who Anup also saw.

74. *Anup ma:tram* Rajane a:nu kandathu

Anup only Rajan.Acc be saw SgN

It is Rajan who only Anup saw.

75. *Anup po:lum* Rajane a:nu kandathu

Anup even Rajan.Acc be saw SgN

It is Rajan who even Anup saw.

76. *Anupum* Rajane a:nu kandathu

Anup also Rajan.Acc be saw SgN

It is Rajan who Anup also saw.

Negation is fine with the *aanu* construction. There are two places in an *aanu* sentence where Negation can appear – on the auxiliary (77) or on the verb (78) corresponding to the scope of Negation.

77. Rajane **alla** Anup kandathu

Rajan.Acc be.Neg Anup saw SgN

It is not Rajan who Anup saw.

78. Rajane a:nu Anup ka:na:ttathu

Rajan.Acc be Anup see.Neg.SgN

It is Rajan who Anup did not see.

The negation on the verb has the verb phrase as its domain whereas the negation on the auxiliary cannot take scope over NPIs below it. This can be illustrated via licensing of NPIs – the sentences are grammatical as long as the Polarity Item is within the domain of verbal negation. *onnum* is a strong NPI in Malayalam that always requires Negation.

79. avan a:nu [onnum kazhikkaathathu]

he be *NPI* eat.Neg.SgN

He is the one who did not eat anything

The sentence is ungrammatical without Negation on the verb.

80. \*avan a:nu [onnum kazhichathu]

he be *NPI* eat.SgN

He is the one who ate anything

The negation on the auxiliary cannot license an NPI below it in the sentence.

81. \*avan **alla** [onnum kazhichathu]

he be.Neg *NPI* eat.SgN

He is not the one who ate anything

NPIs are ungrammatical as the predication base in *aanu* sentences despite the position of Negation.

82. \*onnum a:nu avan kzhikka:thathu  
*NPI* be he ate.**Neg**.SgN
83. \*onnum alla avan kzhichathu  
*NPI* be.**Neg** he ate.SgN

This seems to be similar to the incompatibility of universal quantifiers in the predication base position.

84. \*ella:varum a:nu avane kandathu  
 everyone be him saw.SgN  
 It is everyone that saw him

The construction become grammatical with the following addition:

85. ivar/avar ella:varum a:nu avane kandathu  
 all these/those people be him saw.SgN  
 It is all these/those people that saw him

The same holds in the case of NPIs too.

86. ithu/athu onnum alla avan kzhichathu  
 this/that *NPI* be.**Neg** he ate.SgN  
 It is none of these/those that he ate.

Even with this modification, an NPI, when it appears at the predication base position, cannot be licensed if the negation is on the verb.

87. \*ithu/athu onnum a:nu avan kzhikka:thathu  
 this/that *NPI* be he ate.**Neg**.SgN

Having observed the behavior of these elements in general, we can now move on to their compatibility with Wh in an *aanu* construction. Recall that the Wh has already moved to the predication base position in an *aanu* sentence.

88. a:re<sub>i</sub> a:nu Anup t<sub>i</sub> kandathu?  
 Who be Anup saw.Sg.N  
 Who is it that Anup saw?

Also recall that moving a Wh over the intervener made the sentences grammatical in Korean (examples 48-50). Transposed to *aanu* sentences, this would mean that whenever an intervener is left below the Focus position, there would not be any intervention effects. The

behavior of negation and NPIs corroborate this prediction. Thus, (89) below where negation appears on the verb, which is below the predication base, does not lead to ungrammaticality.

89. a:re a:nu [Anup kanaathathu]?  
 who be Anup see.Neg.Sg.N  
 Who is it that Anup did not see?

We saw that the auxiliary and negation on the auxiliary take scope exclusively on the focused item. Negation on the auxiliary appearing with a Wh results in ungrammaticality.

90. \*a:re alla [Anup kandathu]?  
 who be.NegAnup saw.SgN  
 Who isn't it that Anup saw?

NPIs do not cause intervention effects either since, as shown above, they are licensed only below the predication base position.

91. a:ru a:nu onnum kadhikkaathathu?  
 who be **NPI** eat.Neg.SgN  
 Who is it who did not eat anything?

Particles like *only*, *even*, and *also* trigger differing effects when combined with a Wh. *Only* does not cause any intervention effect when it appears below the Wh-*aanu* pair.

92. a:re a:nu Anup ma:tram kandathu?  
 who be Anup only saw SgN  
 Who is it that only Anup saw?

Although not ungrammatical, Wh-only-be combination is degraded.

93. ?Anup a:re ma:tram a:nu kandathu?  
 Anup who only be saw.SgN  
 Who is it that only Anup saw?

*Only*, when placed above Wh-be, results in ungrammaticality.

94. \*Anup ma:tram a:re a:nu kandathu?  
 Anup only who be saw SgN  
 Who is it that only Anup saw?

A universal quantifier is grammatical with a Wh regardless of its position.

95. avane a:nu ellaavarum kandathu.  
 him be everyone saw.SgN  
 It is him that everyone saw.

96. a:re a:nu ellaavarum kandathu?

whom be everyone saw.SgN

Who is it that everyone saw?

97. ellaavarum a:re a:nu kandathu?

everyone who be saw.SgN

Who is it that everyone saw?

In short, the pattern observed in Beck (1996) that overt movement of the Wh over an intervener annuls intervention effect is borne out.

### 6.5.3 A unified interpretation of the data

The data we discussed in the above section can be summarized as follows:

- Intervention effects are observed both in verb-final and *aanu* constructions.


The intervention effects in verb-final construction patterns with Korean or Japanese where such interveners cause an interrogative sentence with an *in-situ* Wh to crash. There have been various attempts to account for this phenomenon, for example, Pesetsky (1997), Beck (2006) a.o.

Pesetsky (1997) employs the phenomenon to motivate the proposal that Wh *in-situ* in certain contexts involve feature movement rather as opposed to covert phrasal movement. For Beck (2006), the interveners and the Wh involve operators that employ similar mechanisms, viz. alternative semantics. Hence, when a tilde operator invoked by an intervener appears between the Wh and its associated operator, the construction crashes because the tilde operator ends up having to evaluate a phrase with a Wh in it. Thus, configuration like the following invariably leads to a crash:

98. \*[Q<sub>i</sub> [... [intervener [... wh-phrase<sub>i</sub>... ]]]] (Beck 2006:5)

The common denominator for both the accounts above is that a Wh *in-situ* needs to be licensed by something that c-commands it, positioned at the C level. I would like to subscribe to this minimal assumption here and explain the pattern we saw in the previous section with the combination of a Wh and an intervener. Thus, I adopt the following representation adapted to a more theory-neutral terminology of C<sub>INT</sub>.

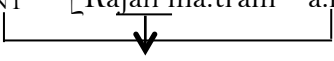
99. \*[C<sub>INT</sub> [... [intervener [... wh-phrase... ]]]]



Recall that in a verb-final construction all four interveners that we looked at cause ungrammaticality. This is very much like the standard examples we see in Japanese and Korean. However, unlike Korean and Japanese, moving Wh across the intervener is not a



grammatical option. This could be straightforwardly explained by the incapability of Wh in Malayalam to scramble to a higher position – they cannot occupy Topic positions where most of the scrambled elements go and a bare Wh in Malayalam is *in-situ*. Thus, the Wh is always below the intervener, and the combinations always ungrammatical.

100. \* $[C_{INT} \quad [Rajan \ ma:tram \ a:re \ kandu]]?$   
  
 Rajan    only        whom saw  
 Whom did only Rajan see?


Recall that a Wh appearing at the Topic position is bad, ruling out the following construction on independent grounds.

101. \*a:re Rajan ma:tram kandu?  
 whom Rajan only saw  
 Whom did only Rajan see?
102. a:re a:nu Anup ma:tram kandathu?  
 who be Anup only saw SgN  
 Who is it that only Anup saw?

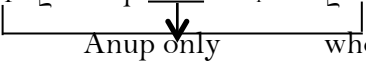
*Only*, when placed above Wh-be, results in ungrammaticality.

103. \*Anup ma:tram a:re a:nu kandathu?  
 Anup only who be saw SgN  
 Who is it that only Anup saw?

This data is explained by the assumptions that the Wh needs to be licensed by a relevant element in C, call it  $C_{INT}$  without making any specific theoretical commitments; and that a focus sensitive operator, when placed between  $C_{INT}$  and Wh blocks the association between them.

104. \* $[C_{INT} \quad [ \dots [ \text{intervener} \quad [ \dots \text{wh-phrase} \dots ] ] ] ]?$   


Thus, we have the representation of 61 as below where the element *only* blocks the association between Wh and  $C_{INT}$ :

105.  $[C_{INT} \quad [ *Anup \ ma:tram_i \quad [a:re_j \ a:nu \quad [ t_i \ t_j \ kandathu ] ] ] ]?$   
  
 Anup only        who    be        saw.SgN  
 Who is it that only Anup saw?

This issue is absent in the grammatical sentence where the element *only* is placed below the Wh by overtly moving the Wh to a higher position than the one occupied by the intervener.



## Chapter 7 In-situ versus Movement

Unselective binding, feature movement and such proposals were developed taking into account the empirical observation that in-situ Wh does not seem to obey islands, subjacency etc. Hence, the data pertaining to the *aanu* construction given below where a Wh phrase mandatorily needs to be ex-situ is rather an anomaly.

1. John aare kandu?  
John whom saw  
Who did John saw?
2. John aare aanu kandathu?  
John whom be saw.Sg.N.  
Who is it that John saw?
3. \*John aanu aare kandathu?
4. \*aare John aanu kandathu?

An argument Wh is in-situ in a Verb-final construction; however, it undergoes obligatory movement to the predication base in *aanu* construction as shown in the above examples. With the possible exception of C-level adjunct Wh phrases, which may be base-generated as the predication base, all other Wh undergo movement to the predication base position in the *aanu* construction. In other words, any Wh phrase that is not base generated as the predication base is ex-situ in an interrogative *aanu* sentence.

If we follow the idea that a Wh word needs to enter into a syntactic relation with the  $C_{INT}$ , then in examples where a Wh phrase is left in situ in an *aanu* construction it is easy to assume that this relation is blocked resulting in ungrammaticality.

Depending on the theoretical model one would like to adopt, there are two plausible analyses the can explain the data – (i) a feature-based account and (ii) a derivational account. The feature based account would make use of the predominantly Focus nature of the predication base in an *aanu* construction and would argue that the ex-situ Wh is a result of Foc-feature driven movement. The derivational account, on the other hand, would argue

that the lower position of the verb in an *aanu* construction creates an opaque domain for an in-situ Wh which forces the QP containing the Wh to move. We explore both the options here. Section 7.1 explores the feature-based account while section 7.2 proposes the locality-based account. It will be shown that there are problems with analysing the Wh movement in *aanu* construction as triggered by a focus feature. Hence an analysis that doesn't require a commitment to wh-movement being a subcase of focus movement will be more desirable. Since the constructions involved have verb movement as a crucial difference, the analysis where verb movement plays an important role – the locality based account – will be favored.

### 7.1 Feature Driven Movement

The predication base position in the *aanu* construction could be, hypothetically, assumed to be encoding Focus. If we subscribe to that premise, then the ex-situ Wh in the *aanu* construction becomes a subcase of Focus-induced movement.

One way to go about the issue would be to assume that a  $[\text{+Foc}]$  feature is associated with the Predication Base and that this feature attracts the Wh word resulting in mandatory movement (cf. Boskovic 2002, Jayaseelan 2001, Sabel 2003 a.o.) with the following starting premise:

- The Auxiliary is a Foc head.
- The Foc head obligatorily attracts a FocXP

Now the question arises as to what counts as a FocXP. Our starting point of the discussion (that a Wh cannot be left in-situ in the *aanu* construction) makes it somewhat obvious that a phrase containing Wh *aka* QP must count as a FocXP in this context.

To refresh the memory, I give the following examples to show that the entire clause needs to be obligatorily moved to the 'Focus'; any other derivation is ungrammatical.

5. Rajan  $[\text{QP aaru vilichathukondu}]$  aanu vannathu?  
Rajan who invite.because be came.Sg.N.  
It is because who invited (him) that Rajan came?
6.  $[\text{QP aaru vilichathukondu}]$  aanu Rajan vannathu?
7. \*Rajan aaru aanu  $[\text{QP } t_i \text{ vilichathukondu}]$  vannathu?
8. \*aaru aanu  $[\text{QP } t_i \text{ vilichathukondu}]$  Rajan vannathu?
9. \* $[\text{QP aaru vilichathukondu}]$  Rajan aanu vannathu?
10. \*Rajan aaru  $[\text{QP aaru vilichathukondu}]$  vannathu?

As shown in the above examples, only the first two sentences where the entire phrase acts as the predication base are grammatical. Movement of Wh out of the adjunct clause or placing a different phrase at the predication base result in ungrammaticality. Thus, the whole QP is counted as a FocXP.

There are many proposals that associate Wh words/phrases with Focus (see Jayaseelan 2003 specifically for Malayalam). However, what we see here is that it is not necessarily just the Wh word that might be counted as carrying a Foc feature. If this were the case, the Wh word would be able to be extracted out of the phrase that contains it to the putative Focus position. As shown in example (8) above, this results in ungrammaticality. The entire phrase containing the Wh needs to be pied-piped. That is, this relation also is mediated via the presence of a QP, in line with Cable (2010) that we have assumed so far. Cable (2010) surmises that

“... although its name calls to mind the notion of a ‘Question-Particle’, our Q-element (and Q-feature) really has no deep connection with interrogativity per se. Let us expand on this view, and further adopt the position that ‘Q’, as we have been using the term, is simply a syntactic category label. Consequently, the Q which we have been studying throughout this work might simply be a single instance of a more general category. For example, we might hypothesize that the syntactic category ‘Q’ also contains heads that we may dub ‘Q<sub>FOC</sub>’ and ‘Q<sub>REL</sub>’. Consequently, let us rename the Q-particle found in wh-questions and wh-indefinites as ‘Q<sub>Q</sub>’” (p.201)

Cable goes on to point out the similarity between the Exhaustive Identification Operator proposed by Horvath (2007) as responsible for Focus movement and the Q<sub>FOC</sub>. Thus, we get a Q<sub>FOC</sub>P that gets attracted to the Focus position marked by *aanu*. This explains the legitimacy of the Q<sub>FOC</sub>P’s presence at the Foc position as well as the ungrammaticality of examples 7 and 8 where the Wh is extracted out of the Q<sub>FOC</sub>P. It is Q<sub>FOC</sub>P that is targeted by the Foc head, and not the Wh. Hence, extracting the Wh out of the Q<sub>FOC</sub>P results in ungrammaticality.

What renders the next two examples (9&10) ungrammatical?

The sentences are ungrammatical even if the phrase ‘Rajan’ is stressed or emphasized to obtain an unmistakable Focus interpretation. This points to the following possibility:

The Foc head has an EPP feature that instantiates only a single Specifier; consequently only one FocXP can be licensed in the derivation.

This might be the case as it is ungrammatical to have two phrases receiving Focus interpretation in the *aanu* construction:

11. \* Rajan    aanu       Priyaye    aanu    kandathu  
       Rajan    be           Priya.Acc be       saw.Sg.N.
12. Rajan    Priyaye    aanu    kandathu  
       Rajan    Priya.Acc be       saw.Sg.N.  
       ‘Rajan, it is Priya that he saw’.

11 is ungrammatical; 12 has only the reading where the first phrase is interpreted as a Topic and only the phrase right in front of the Auxiliary is interpreted as Focus pointing to the fact that the Auxiliary/Focus head allows for a single Specifier position<sup>45</sup>.

So we have a feature driven analysis that seems to explain the data. Except for one problem. Thus far, we have operated by tacitly assuming the following procedure:

- There is a Foc head that attracts a  $Q_{FOCP}$
- $Q_{FOCP}$  moves to the Specifier of the Foc Head
- Only one  $Q_{FOCP}$  can move to the Specifier.

The underlying assumption here can be either of the following:

- (i) A  $Q_{FOCP}$  that is not in a Spec-Head relation with the Foc head leads to crash
- (ii) There can be only one  $Q_{FOCP}$  in the numeration

Assumption (i) could be proven wrong without much ado by the fact that a phrase containing a Wh can be in-situ in a verb-final construction. That is, if a phrase containing a Wh can be interpreted as a  $Q_{FOCP}$  due to its ‘association with Focus’, then it is unclear as to why this association is not operational in a verb-final construction. Unless one is ready to believe in an *ad hoc* solution that the  $Q_{FOC}$  is not activated in the absence of a Foc head

---

<sup>45</sup> It is possible to add –okke to a Wh and have a sentence like the following to get a pair-list answer:

aarokke enthokke    aanu    vaangiyathu?  
 Who all what all    be       bought.Sg.N.  
 Who bought what?

This need not be taken as evidence against the argument made here against multiple specifiers for the Auxiliary – see Richards (2001), Grewendorf (2001) for plausible explanations.

(which would arguably be a case of ‘look ahead’ (Chomsky 1998) in this case), or something similar. The simplest deduction would be that a Wh containing phrase may not necessarily be a  $Q_{FOCP}$ .

As we saw in section 6.5, intervention effects in verb-final constructions serve to provide evidence that there isn’t any covert phrasal movement of the Wh in-situ. That is, even if with continue with the “association with focus” line, the putative  $Q_{FOCP}$  in a verb-final construction does not require to be moved to a  $[\text{Spec, Foc}]$  to be legitimized. Section 5.4 in Chapter 5 discussed and discarded the idea that the Wh could be moving overtly to an IP-internal Focus position. Thus, we find no empirical basis to continue with assumption (i) above.

Moreover, even if one accepts the *ad hoc* solution for the sake of argument, we are stuck with issues related to intervention effect. In order to see why this is the case, let us look at the  $Q_{FOCP}$ . Presumably, it has the following structure

$$[_{Q_{FOCP}} [_{QP} \dots \text{Wh} \dots ]]$$

where the  $Q_Q$  that needs to enter into a relation with the licensing C head  $C_{INT}$  is inside the  $Q_{FOCP}$ . Now, recall that Focus related particles and operators give rise to intervention effects (Beck 2006). Then, we need further *ad hoc* assumptions as to why the  $Q_{FOC}$  does not intervene between the  $Q_Q$  and the licensing C head.

That leaves us with the second assumption that there is place for only one  $Q_{FOCP}$  in a numeration. This also, as it turns out, is a problematic assumption. To begin with, Focus is a cover term used to indicate different information structure notions such as contrastive focus, information focus, verum focus etc. That means, by virtue of assumption (ii) we are dealing with here, there can be only a phrase that is interpreted as exhaustive or a phrase that carries Information Focus or a phrase with Contrastive Focus. No two of these may co-occur in a construction. While structurally represented Contrastive Focus is indeed incompatible with an *aanu* construction, Contrastive Focus expressed through stress is fully compatible with a QP as shown below:

Context: Rajan and Priya are talking about the interactions of people at a party. Rajan tells Priya that Aniyana saw Meera. However, Priya is interested in news about Anup and can ask the following question with ‘Anup’ being contrastively focused.

13. aare        aanu    **Anup**        kandathu?  
       Whom    be        Anup        saw.Sg.N.  
       ‘Who did Anup see?’

However, notice that this variety of Focus relies primarily on stressing the word and not on Syntax. Thus, it might be the case that there are two different mechanisms operating here and thus, not a problem for the featural analysis.

On the other hand, when a QP appears along with a syntactically Focused phrase, it receives a narrow scope interpretation. When a Wh appears inside a finite complement clause it is possible to have a phrase other than the one containing the Wh to act as the predication base; the complement clause being interpreted as an indirect question, suggesting that a Focus-driven movement analysis may hold water.

14. [Rajan    aare        kandu ennu]    Priya    aanu    paranajthu  
       Rajan    whom        saw    QC        Priya    be        said.Sg.N  
       It is Priya who said whom Rajan met.

How do we know that the entire complement clause can be perceived as a QP visible to the matrix Foc? We know it because it is possible to move the finite complement clause containing a Wh to the Foc and derive a wide scope interpretation for the embedded Wh.

15. Rajan    aare        kandennaa    Priya    paranajthu?  
       Rajan    whom        saw.QC.be    Priya    said.Sg.N.  
       Who did Priya say Rajan met?

On the other hand, it should be noted that syntactically encoded Contrastive Focus constructions that we discussed in Chapter 3 section 3.2.2.1 are not amenable to content questions at all as discussed in Chapter 5, section 5.7. The relevant datum is repeated below:

16. ???/\*Rajan        aare-e:        kand-ullu:?  
       Rajan        whom-Contr        saw-be.Contr  
       Who is the only one that Rajan met?

If the Wh phrase is a Q<sub>FOCP</sub>, then it is not entirely clear why it is incompatible with a syntactically encoded focus construction while compatible with another.

Finally, recall arguments from the Chapter 3 that *aanu* may not be assumed to be a Foc head. Furthermore, it was shown in Chapter 5 that movement of Wh in the *aanu*



construction is not an instance of Focus movement. I would like to remind the reader especially of the grammaticality of a “mention-some” question with the *aanu* construction:

*Context:* You are in a new place, and would like to buy a newspaper. The most natural way a Malayalam speaker from my region ask the question is by using a Type II sentence:

17. evideya:        oru pathram        kittunne?  
       Where.be        a paper                get.Sg.N.  
       Where is it that (one) can get a newspaper?

If one still believes that the *aanu* sentences are exhaustive focus constructions and hence the movement of a Wh in such a sentence is Focus movement, then the grammaticality of the above example provides a strong counter-argument.

Syntactically, recall again a point raised in Chapter 5: The following example shows that there can be only one putative Focus position in an *aanu* sentence.

18. \*Rajanaa        Priyayeyaa        kande.  
       Rajan.be        Priya.Acc.be    saw.Sg.N.

However, in stark contrast to this, it is possible to have the following multiple question:

19. aaraa            enthaa        paranje?  
       Who.be            what.be        saw.Sg.N.  
       ‘Who said what?’

This thesis would adhere to the second alternative, viz. a locality based analysis that doesn’t require a commitment to wh-movement being a subcase of focus movement, for the following reasons:

- (i) as we saw in chapter 3 section 3.2, the Auxiliary that marks the predication base cannot *a priori* be assumed to be a Foc head as we did in this section; furthermore, as shown in Chapter 5, section 5.7, assuming *a priori* that Wh movement in the *aanu* construction is Focus movement cannot be supported empirically.
- (ii) Focus, as mentioned elsewhere in this section, is often used as an amorphous blanket term. For example, while the *aanu* construction is amenable to interrogative readings, syntactically encoded Contrastive Focus constructions do not lend themselves to content questions, providing at least one anomaly against using the term Focus without qualifications.
- (iii) the verb movement facts that we discovered independently of QP movement in the two constructions under analysis provide a pivotal difference that can be argued to be crucial in defining the licensing domain for a QP (as we will see in the next section).

## 7.2 Being in the Right Domain: An Alternative Based on Locality

We saw in Chapter 2 that the Verb-final construction has the verb moving to C whereas the *aanu* construction, as examined in Chapter 3, has the verb moving only up to I. Assuming that head movement is syntactic, one can look for syntactic effects of this movement.

We will restrict ourselves to content questions in this chapter and explore the conditions that make the relation between a QP and the licensing interrogative C possible. As we saw in the previous chapter, unless aided and abetted by external factors such as an operator/Focus or quantifier elements, a bare Wh in Malayalam is in-situ. It will be argued that the relation between a QP and its licensor in Malayalam respects Phase Impenetrability Condition (Chomsky 2005 et al). In the verb-final constructions where Wh is in-situ, the verb is in C, displacing the barrier to C in line with Chomsky (1986). To translate into contemporary terminology, the verb movement to C extends the Phasal domain whereby the C-level licensing element and the Wh are in the same phase. However, as shown in earlier discussions, the verb does not raise all the way up to C in the *aanu* construction. This predicts that there will be a barrier, a phase boundary, between an in-situ Wh and the C-licensor. Hence, an in-situ Wh will be rendered ungrammatical, as evidenced by data. This can be overcome by making the Wh ex-situ; by moving it into the same phase domain as its licensor. Which is exactly what we see in an *aanu* construction.

### *Barriers and Phases*

To recap, we have the following wh in-situ (eg.20) and ex-situ (eg.22) constructions in Malayalam<sup>46</sup>:

20. Rajan aare kandu?

Rajan whom saw

Whom did Rajan see?

21.  $[_{CP} [_{Vc} [_{IP} \text{Rajan}_i [_{vP} t_i \text{aare } t_k]]] \text{kandu}_k]$

22. aare aanu Rajan kandathu?

Whom be Rajan saw.Sg.N.

Who is it that Rajan saw?

23.  $[_{CP} \text{aare}_j [_{C} \text{aanu} [_{IP} \text{Rajan}_i [_{v_i} [_{vP} t_i t_j t_k] \text{kandathu}_k]]]]]$

<sup>46</sup> The notation used in the bracketed structure shown here is adopted from Chomsky (1986) where a chain formed by the movement of V to I was represented as (V<sub>i</sub>, t). In more current terminology, V<sub>i</sub> and V<sub>C</sub> here indicate the position where V is pronounced in the relevant sentence.

The idea that head movement is an operation that takes place in Narrow Syntax is a much-debated issue (see Roberts 2011 for a brief overview). One of the most explicit proposals about the syntactic effect of this movement can be seen in *Barriers* (Chomsky 1986, p.72) where the discussion adopts “[...] the fairly standard assumption that the relevant properties of the raised V, including index, ‘percolate’ to  $V_I$ ”,  $V_I$  being the ‘amalgamated inflected verb’. One of the main features that percolated was barrierhood of the VP. In other words, the V-to-I movement extended the domain of the barrier upwards. It was further proposed that “If an element of I raises to C — say, a modal [...] — then the VP retains its status as a barrier [...].”

It, then, straightforwardly follows from our analysis of the two constructions that there is only a single barrier in the verb-final construction in (20), whereas there are two barriers in the *aanu* construction in (22) by virtue of the facts that (a) V moves only up to I and (b) *aanu* occupies a C head. In the *aanu* construction V is in I, hence the barrier is at IP, rather than VP.

The parallels between barriers and Phases have been noted in the literature (see for eg: Boeckx and Grohmann 2004). Reinterpreting the effects of head movement, especially verb movement in terms of Phases also has been attempted (see Den Dikken 2007, Gallego 2010 a.o.; for a critique of Den Dikken 2007, see Pesetsky 2007). Gallego (2005, 2010) has proposed that verb movement to T pushes the  $v^*P$  phase up to TP. Thus, “[...]  $v^*$ , the strong phase head, can still be said to be the center of the resulting structure, and, in principle, it should be able to trigger any syntactic operation from its derived position.” A similar approach is taken here, where the canonical  $v^*P$  phase will be assumed to have extended all the way up to C in verb-final constructions and up to IP in the *aanu* construction. However, the analysis here crucially differs from Gallego (2010) in that Gallego (2010) proposes that although V-to-T movement extends the  $v^*$  phase, T to C movement cannot extend the Phase again (p.110. fn:47). It will be argued in the following section here that the movement of the verb in Malayalam verb-final constructions brings everything other than the Specifier of C within the C-commanding domain of  $V_C$  and for all practical purposes, the clause behaves as if there is no barrier/intermediate phase.

Applying this, we get the following representation for the sentences (17) and (19):

24.  $[_{CP} \left| [_{V_C} [_{IP} \text{Rajan}_i [_{VP} t_i \text{aare } t_k]]] \text{kanduk}_k \right|]$

25.  $[_{CP} \text{aare}_j \left| [_{C} \text{aanu} [_{IP} \text{Rajan}_i \left| [_{V_i} [_{VP} t_i t_j t_k] \text{kandathuk}_k \right|]] \right|]$

Thus, in (24), the construction is expected to behave effectively as if it has a single-phase head  $V_C$ . This phase head is the highest head in the structure and hence every element except the Specifier is in its c-commanding domain. We will come back to this point later. The *aanu* construction, on the other hand, has two different phase heads, namely, C and  $V_I$ . Hence we expect to see an active barrier *aka* Phase Impenetrability Condition in an *aanu* construction. The behavior of Wh in these two constructions is explained in the next section based on this premise.

### 7.2.2 Verb-final Construction

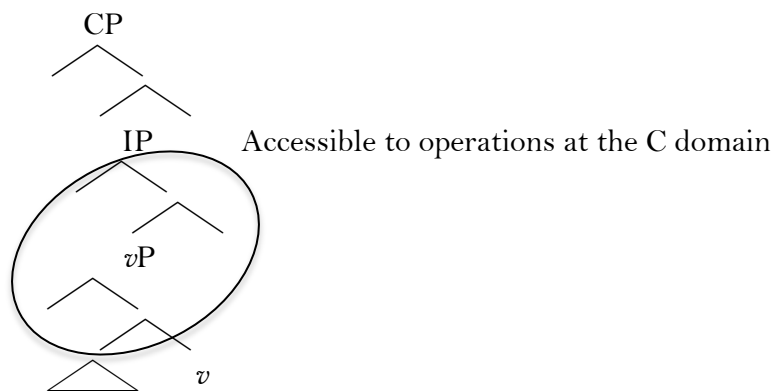
Let us begin with the domains of C, T and  $v$  with no verb movement beyond  $v$ .

Chomsky (2001) proposes that assuming Z and H are phase heads, in a configuration such as

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

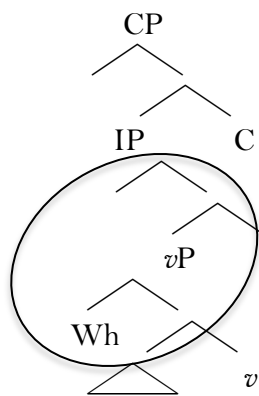
the domain of H is not accessible to operations at ZP (DbP version of PIC). That is, the domain of  $v$  is unavailable for operations of C.

26. .



That is, if a Wh is to enter into a relation with an interrogative C, then it has to be [Spec, IP] or at [Spec, vP]. Thus it follows straightforwardly that a subject Wh is in the domain of  $C_{INT}$  and any movement might be what could be characterized as 'string vacuous movement'.

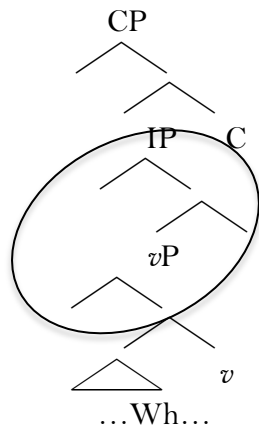
27.



Accessible to operations at the C domain

What happens with an object Wh? The object Wh is inside the domain of  $v$  and thus inaccessible to  $C_{INT}$ . The standard story would be that it uses the edge of  $vP$  as an escape hatch to be available for movement to a licensing C. However, Wh in Malayalam does not have sufficient quantificational force to move on its own (cf. Chapter 6);  $C_{INT}$  does not – to use an old jargon – ‘attract’ the Wh to its specifier inducing movement. We get the following representation:

28.



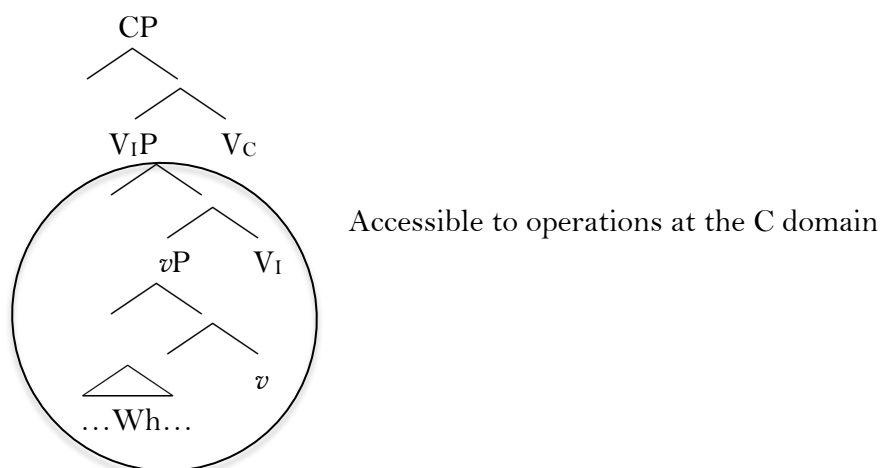
Accessible to operations at the C domain

Yet, we find that an Object Wh in situ is perfectly grammatical in Malayalam.

I would like to argue that this is possible by virtue of V-to-C movement in verb-final constructions. We saw in Chapter 2 that the verb moves all the way to the C domain in verb-final constructions. We also saw in the previous section that once we subscribe to the idea that head movement is syntactic, the V-to-C movement must have syntactic effects. One such effect is characterized as a direct impact on the barrier imposed by the moving head, if any. In the case of Malayalam, this would be the barrier imposed by  $v$ . Translated into contemporary terminology, this would mean an extension of the Phase boundary (see

Boeckx and Grohman 2004 for a comparison between barriers and phase boundaries) and we get the following derivation instead of the representation given in 26.

29.



The verb moves to C, instantiating a C-T complex where the features that are proposed to be on C are not transferred to lower heads (see Biberauer 2005, Miyagawa 2010 for proposals in this vein). This is in line with Amritavalli and Jayaseelan (2005) where it is argued that Dravidian languages do not project a distinct TP in the clause.

The moved V becomes the locus of the Wh feature with the interrogative interpretation is given voice by the intonation. As noted before, the word order need not differ from the declarative counterpart to yield an interrogative interpretation – the Wh can appear exactly in the same place as its non-Wh counterpart. Nor does Malayalam have an overt question particle to indicate the scope of the Wh or the type of the construction (a la Cheng 1991). Thus, we get the two factors that distinguish an interrogative sentence from a declarative sentence in Malayalam: (i) a Wh word and (ii) intonation – (i) the in-situ Wh word licensed by the interrogative  $V_C$  and (ii) the interrogative  $V_C$  being signaled by intonation.

How can one be sure that the  $V_C$  is the derived locus of the interrogative feature? Recall that the question particle itself does not have a phonological reflex in Malayalam and the verb remains in the same clause final position in both declarative and interrogative sentences (modulo topicalisation etc.). Hence we have to resort to circumferential evidence to assert that  $V_C$  is the locus of the interrogative features. This can be done by examining the overt Question Particle that is mandatory in Yes/No questions.

30. avan Rajane kandu.

He Rajan.Acc saw

He saw Rajan.

31. *avan* *Rajane* *kandu*?  
 He *Rajan.Acc* saw.Q  
 Did he see Rajan?

The question morpheme has to go with the verb obligatorily, appearing at any other place results in ungrammaticality.

32. \**avan* *Rajane* *kandu*?  
 He.Q *Rajan.Acc* saw  
 Did he see Rajan?
33. \**avan* *Rajane(y)* *kandu*?  
 He *Rajan.Acc.Q* saw  
 Did he see Rajan?

The examples 32-33 are ungrammatical only in a Y/N question interpretation; they are perfectly grammatical with other non-interrogative interpretations, lending support to the argument that the  $V_C$  carries the interrogative feature in an interrogative construction.

Coming back to the point under discussion, V-to-C movement extends the Phase boundary, with the effect of bringing the in-situ QP within the purview of the interrogative C.

### 7.2.3 *aanu* Construction

We saw in Chapter 3 that the verb does not move to the C domain in *aanu* construction. Instead, the auxiliary spells out the C-domain projections while the verb raising maximally to  $T^{47}$ . What effect does this have on the syntax?

The immediately visible effect of this is that now we get distinct and split C and T projections<sup>48</sup>, the separate C projection being occupied by the auxiliary, giving rise to a criterial position.

<sup>47</sup> The section will proceed under the assumption that V-to-I movement happens in the *aanu* construction.

<sup>48</sup> A split C-T also could mean that some of the features that are assumed to originate in the C domain are transferred to T, the most commonly inherited feature being uninterpretable phi-features (Chomsky 2008). In some languages this inheritance manifest as an EPP feature on T, which needs to be satisfied by an overt element at [Spec TP] while in other languages this finds expression as a D-feature on T that may be satisfied by moving the verb to T (Alexiadou and Anagnostopoulou 1998). It is possible to argue that Malayalam falls into the latter type, where the verb moving to T and satisfying the inherited phi-features. This finds a phonological reflex in the appearance of the Sg.N. morpheme affixed to the verb as suggested by Alexiadou and Anagnostopoulou 1998.

“A “Criterion” (Topic Criterion, Focus Criterion, etc.) is the requirement demanding the creation of a local Spec-head configuration which is then passed on to the interface systems where the relevant interpretive instruction is triggered” (Rizzi 1997, 2007). Thus, whenever this position is manifested, it demands its Specifier to be filled and the element at the specifier is frozen in this position.

As mentioned, although a radical pro-drop language, the element at the Focus position can never be a pro.

34. \**pro*        a:nu    innale        vannathu.  
           Pro    be        yesterday    came.Sg.N.  
           Pro is who came yesterday.

Even when the auxiliary is optionally dropped in the context of topicalisation of the background, the focused element cannot be dropped.

35. innale        vannathu        Rajan        (a:nu).  
           yesterday came.Sg.N.    Rajan        be  
           Rajan is who came yesterday.
36. \*innale        vannathu        *pro*        (a:nu).  
           yesterday came.Sg.N.    *pro*        be  
           *pro* is who came yesterday.

This is ungrammatical even in the context of a direct question like the following:

37. Rajan a:ru        a:nu?  
           Rajan who        be  
           Who is Rajan?
38. \**pro*        a:nu        innale        vannathu  
           *pro*        be        yesterday    came.Sg.N.  
           Pro is who came yesterday.
39. \*innale        vannathu        *pro*        (a:nu).  
           yesterday came.Sg.N.    *pro*        be  
           Pro is who came yesterday.

The predication base is frozen in this place and extraction is ungrammatical. In the minimal pair below, the object of the embedded verb-final clause is in the predication base position of the matrix clause. Extracting this element in an embedded clause results in ungrammaticality.



40. Rajane<sub>i</sub> a:nu [Anup t<sub>i</sub> kandennu] Aniyān parānjathu  
 Rajan.Acc be Anup saw.Comp Aniyān said.SgN  
 Rajan is who Aniyān said that Anup saw.
41. \*Rajane<sub>i</sub> a:nu [t<sub>i</sub> a:nu Anup kandathennu] Aniyān parānjathu  
 Rajan.Acc be t<sub>i</sub> be Anup saw.Sg.N.Comp Aniyān said.SgN  
 Rajan is who Aniyān said that Anup saw.
42. \*[t<sub>i</sub> a:nu Anup kandathennu] Aniyān parānjathu Rajane<sub>i</sub> a:nu  
 be Anup saw.Sg.N.Comp Aniyān said.SgN Rajan.Acc be  
 Rajan is who Aniyān said that Anup saw.

Thus the predication base position in *aanu* sentence appears to be a criterial position – the element appearing at this position may get a Focus interpretation as we saw in Chapter 3 and is frozen in that position.

This proposal where the auxiliary is at C and the verb at T is further strengthened by the behavior of two constructions w.r.t a wide scope reading of Wh inside them; a Wh inside a subordinate *aanu* construction cannot have wide scope regardless of the nature of the matrix clause. Examples are given below.

Verb-final complement clause; verb-final matrix clause: wide scope possible for Wh.

43. Priya aaru vannennu parānju?  
 Priya who came.QC said  
 Who did Priya say came?

Verb-final complement clause; *aanu* matrix clause: wide scope possible for Wh.

44. aaru vannennā Priya parānje?  
 Who came.QC.be Priya said.Sg.N.  
 Who is it that Priya said came?

*aanu* complement clause; verb-final matrix clause: wide scope *not* possible for Wh.

45. aaraa vanneenu Priya parānju.  
 Who.be came.Sg.N.QC Priya said.  
 Priya said who came.

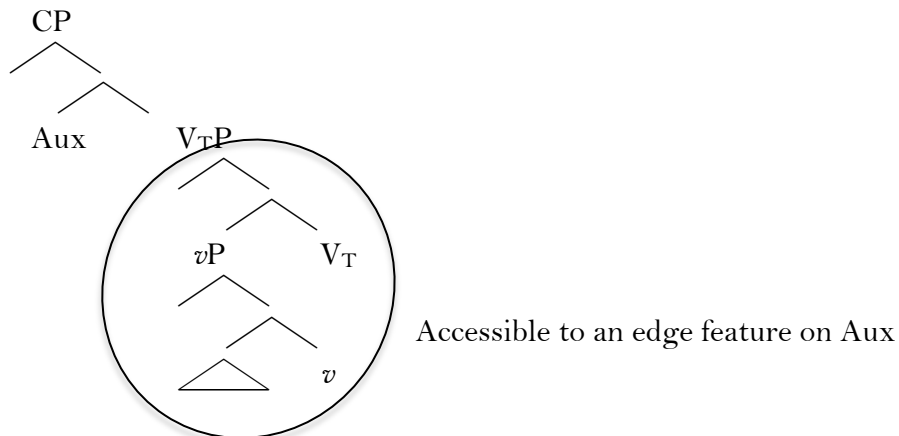
*aanu* complement clause; *aanu* matrix clause: wide scope *not* possible for Wh.

46. aaraa vanneennā Priya parānje.  
 Who.be came.Sg.N.QC.be Priya said.Sg.N.  
 It is who came that Priya said.

Thus, in (45) and (46), the embedded clause is an *aanu* construction and the sentences cannot have an interrogative interpretation – the auxiliary in C creates an opaque domain for operations from the matrix C.

The verb moving only to T would also mean that a Phase boundary is induced at T.

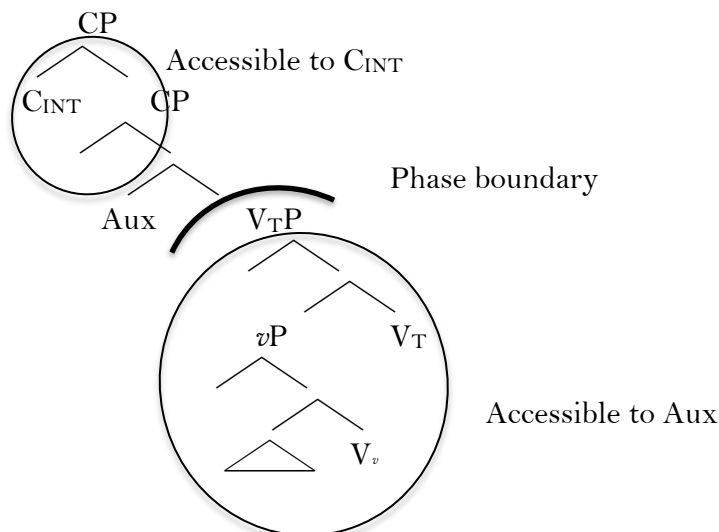
47.



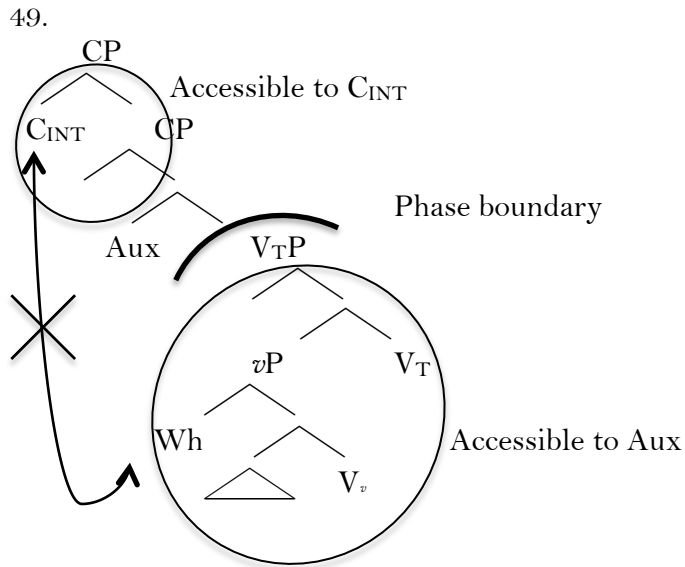
As we saw earlier, the idea is that when a head moves, “the relevant properties of the head” moves with it or “percolates” to the new head. In the case of  $V_T$ , what we have is a phase head moving, so we expect the phase to expand as well (see Gallego 2010 for an extensive discussion of this, what he calls *phase sliding*). In other words, once  $V_T$  comes into being, it becomes the new phase, the barrier instantiated by the  $v^*$  is rendered void (Chomsky 1986). In terms of phases, this would mean that the operation transfer that would normally make the VP inaccessible once T is merged would not take place in the eventuality of V-to-T movement. This expands the erstwhile domain of T as we see in the above diagram to the new domain of  $V_T$ . Thus, the entire derivation upto this point is accessible for the position instantiated by the Auxiliary. Empirically, this is exactly what we see in an *aanu* construction – any element in the clause can appear at the predication base position (cf. Chapter 3).

However, notice that if there is a head above the the Auxiliary, say,  $C_{INT}$ , the phase boundary at  $V_T$  makes anything below the Specifier of the Auxiliary inaccessible for  $C_{INT}$  by virtue of Phase Impenetrability Condition:

48.



A straightforward prediction of this derivation would be the following: If a Wh is left in its in-situ position, the licensing  $C_{INT}$  which is at the C-domain cannot get into a relation with the Wh, since the Phase Impenetrability Condition would make it unavailable to the  $C_{INT}$ .

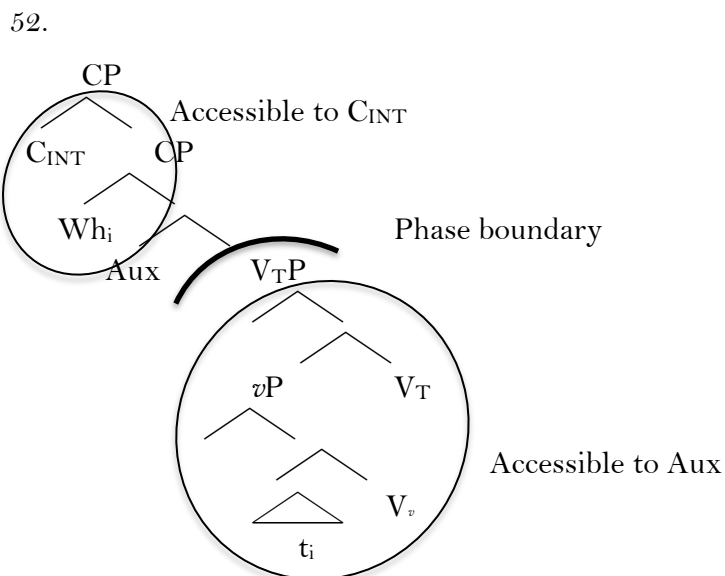


This prediction is borne out, a Wh left in-situ is ungrammatical when it comes to the *aanu* construction:

50. \*Rajan aanu aare kandathu?  
 Rajan be whom saw.Sg.N.

The only grammatical way to do this is to move the Wh at the predication base position, thereby placing it within the accessible domain of  $C_{INT}$ :

51. aare aanu Rajan kandathu?  
 Whom be Rajan saw.Sg.N.  
 Who is it that Rajan saw?



However, this raises another question: How do we know that the QP is not moving to the specifier of C<sub>INT</sub>?

Cardinaletti (2006) has shown that in the case of Italian interrogatives, this type of Wh movement is *not* to a position where it is in a Spec-Head configuration with the interrogative licensor. In other words, the movement of the Wh merely places it within the domain of the licensing head. This is true for the Malayalam *aanu* construction as well, as is evidenced by the Intervention effects we discussed in the previous chapter (eg. 94, ch. 6). Even after moving the QP to the predication base position, interveners can make the sentence ungrammatical showing that the QP is not yet in a Spec-Head local relation with the C<sub>INT</sub> (eg. 103&105, ch.6).

It can be argued that in line with Rizzi (1999) the C<sub>INT</sub> is not equivalent to a Force projection that is proposed to be highest in a clause. It appears that a Topic projection can appear above the C<sub>INT</sub> in Malayalam, giving rise to island effects.

The *aanu* construction can instantiate a Topic position as shown in the following example:

53. Rajan Aniyane aanu kandathu  
 Rajan Aniyan.Acc be saw.Sg.N.  
 Rajan, it is Aniyane that (he) saw.

54. [<sub>TopP</sub> Rajan<sub>i</sub> [<sub>AuxP</sub> Aniyane<sub>j</sub> aanu [<sub>TP</sub> t<sub>i</sub> t<sub>j</sub> kandathu]]]]

Topicalisation is possible out of a verb-final structure as well.

55. Aniyane Rajan kandu  
 Aniyane.Acc Rajan saw  
 Aniyane, Rajan saw (him).

56. [<sub>TopP</sub> Aniyane<sub>i</sub> [<sub>VcP</sub> Rajan t<sub>i</sub> kandu]]

An empirical fact pertaining to the Topic position in both verb-final and *aanu* constructions is that a Wh is uniformly ungrammatical in that position.

57. \*aaru Aniyane aanu kandathu?  
 who Aniyane.Acc be saw.Sg.N.  
 Who is it that saw Aniyane?

58. [<sub>TopP</sub> aaru<sub>i</sub> [<sub>AuxP</sub> Aniyane<sub>j</sub> aanu [<sub>TP</sub> t<sub>i</sub> t<sub>j</sub> kandathu]]]]

59. \*aaru Rajane kandu?  
 Who Rajane.Acc saw  
 Who saw Rajane

60. [<sub>TopP</sub> aaru<sub>i</sub> [<sub>VcP</sub> Rajane t<sub>i</sub> kandu]]

This can be further illustrated with the Topic island effect that is obtained in Malayalam. Like many other Wh in situ languages, a Wh can be inside a Relative Clause and an embedded verb-final clause in Malayalam and still receive wide scope. However, a Wh inside a *because* clause is ungrammatical.

61. [manthri nirbandhiccathu kondu] police avane arrest ceythu  
 minister force.Sg.N with police he.Acc arrest did

Police arrested him because the minister forced (them to act).

62. \* [a:ru nirbandhiccathu kondu] police avane arrest ceythu?  
 who force.Sg.N with police him arrest did

Who is X such that the police arrested him because X forced them to do so?

63. \*police [a:ru nirbandhiccathu kondu] avane arrest ceythu?

The only rescue comes in the guise of *aanu* construction:

64. [a:ru nirbandhiccathu kondu] a:nu  
 who force.Sg. with be

police avane arrest ceythathu?

police he.Acc arrest did.Sg.N

Who is X such that the police arrested him because X forced them to do so?

Reason clauses are argued to be adjoined at the C-domain (see Tsai 2008 among others). Assuming that the only available position that can be added to a verb-final construction is Topic, it would mean that a Topic position is instantiated when a reason clause is merged. Evidently, this Topic position is outside the purview of the interrogative C head C<sub>INT</sub> and a QP in this position cannot enter into a relation with the C<sub>INT</sub>, rendering the sentence ungrammatical.

As opposed to this, when placed at the predication base position, the QP is well within the purview of C<sub>INT</sub> since the Aux projection where the QP appears is c-commanded by C<sub>INT</sub>. This makes the sentence grammatical. In short, a QP containing a Wh needs to be within the accessible domain of a C<sub>INT</sub> for the sentence to receive an interrogative reading. In the case of verb-final constructions where the Wh is in-situ, this is achieved by the V-toC movement that extends the Phase boundary; in the case of the *aanu* construction, the QP undergoes movement so that it can be within the domain of C<sub>INT</sub>.

### 7.3 Summary

This chapter put proposed two alternative analyses, namely, a feature-based analysis and a locality-based analysis in an attempt to account for the in-situ versus ex-situ behavior of the QP/Wh in verb-final versus *aanu* constructions. The featural analysis started from the hypothetical premise that *aanu* construction is essentially a Focus construction, and a QP/Wh belongs to the family of Focus-associated elements. While intervention effects might endorse placing a Q element along with Focus associated operators, it was not entirely clear how far can one go in assuming a definitive syntactic Focus head in an *aanu* construction, as discussed in Chapter 3 earlier. Besides, the two constructions under discussion showed one difference that could be argued to be crucial when it comes to locality constraints – the verb moved to C in verb-final, but moved only to I in the *aanu* construction. This independent factor motivates the locality-based analysis, which is promoted in this thesis. The V-to-C movement in the verb-final construction extends the *v* phase all the way up to C and leaves a QP/Wh in its base position anywhere below the verb in a clause within the accessible domain of the C<sub>INT</sub>, making in-situ QP/Wh grammatical. As opposed to this, in an *aanu* construction the verb moves only to I, resulting in a Phase Boundary at I and the C is spelled out by an Auxiliary. This makes a QP/Wh obligatory move to the C-domain to escape Phase Impenetrability Condition, and the position available for such movements is the Predication Base position marked by the Auxiliary in C. This is not a movement to the licensing C<sub>INT</sub> as evidenced by the fact that intervention effects are still active even after this movement. This movement brings the QP/Wh into the accessible domain of the C<sub>INT</sub> and is, therefore, obligatory. Thus, this chapter argues for an analysis of the in-situ versus ex-situ QP/Wh in Malayalam where locality conditions play a crucial role.

## Chapter 8 Conclusion

The phenomenon that linguistic items can be pronounced in places different from their origin has been a point of great interest in the syntactic literature. While it is fairly uncontroversial that phrasal elements undergo movement, the idea that heads also can do so was met with mixed response. This thesis 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 (QP) to undergo movement.

The basic proposal explored in the thesis is neither new nor exceptionally original. In fact, it 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 the thesis 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 thesis 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 a Wh to the pre-auxiliary position. That is, Wh movement makes a verb-final construction ungrammatical while an *aanu* construction is ungrammatical without movement.

One way to unify the two seemingly inconsistent requirements is to postulate that the feature that causes overt dislocation does indeed effect covert or masked (by movement of other elements) movement in the apparent in-situ sentences. This is exactly what has been argued for Malayalam where the Wh in a verb-final construction was analysed as moving to a preverbal focus position (Jayaseelan 2001). It was shown in chapter 5 that this movement-to-preverbal position is the effect of the Wh behaving like an indefinite and thus lacking the necessary force to undergo scrambling. In the case of the *aanu* construction, it was shown that, empirically, the movement of elements to the pre-auxiliary position cannot be conclusively shown to be a case of movement triggered by a focus feature, apart from the fact that topical elements also can occupy this position. The obstacles to an analysis in terms of focus movement are more pronounced in the case of Wh elements as we saw in chapter 5. Theoretically, the thesis attempted to formalize the idea that Wh is associated with focus by

adopting Cable (2010) and positing a  $Q_{\text{FOC}}$  mediating the movement. However, this attempt fails, too, as shown in chapter 7. Therefore, in the case of Malayalam, an analysis that doesn't require a commitment to wh-movement being a subcase of focus movement is favoured over proposals for movement induced by a focus feature (such as Sabel 2003).

The alternative proposal argued for in the thesis takes verb movement to be a syntactic phenomenon with syntactic effects. 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 old concept that head movement can extend barriers, 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  $C_{\text{INT}}$  and does not need to move. In fact, it cannot move since the scrambling positions require elements that are more referential. However, in an *aanu* construction, the low verb creates a Phase boundary between the  $C_{\text{INT}}$  and the Wh, thereby rendering an in-situ Wh within the IP domain ungrammatical. Now the only option for the Wh is to get into the C-domain, and as we saw in the case of verb-final construction, the Wh lacks the necessary quantificational force to effect movement using the usual scrambling positions. The only option left for the Wh to be licensed is to find an edge feature that will trigger its movement to the C-domain. This position is provided by the auxiliary at C, *aanu*. The Wh undergoes mandatory movement to this position, and the sentence is saved.

In short, the thesis argues for verb movement, and shows that it has important syntactic manifestations. The thesis also shows that at least in the case of Malayalam, tying up Wh movement with movement induced by a focus feature is not a straightforward assumption. The case study in the thesis is limited to Malayalam; generalizing the proposal to include other similar languages is an area that is not explored here. I leave it for future research.



## References

- Alexiadou, A. and E. Anagnostopoulou .1998. "Parametrizing AGR: Word Order, Verb- Movement And EPP Checking". *Natural Language And Linguistic Theory* 16: 491-539.
- Amritavalli, R. and Jayaseelan, K.A. 2005. Finiteness And Negation In Dravidian. In *The Oxford Handbook Of Comparative Syntax*, edited by Guglielmo Cinque and Richard S. Kayne, pp. 114-136. OUP, Oxford.
- Anandan. 1985: *Predicate Nominals In English And Malayalam*. M. Litt., Dissertation. CIEFL. Hyderabad.
- Aoun, J. and Y.-H. A. Li. 1993a. "Wh-Elements In Situ: Syntax Or LF?". *Linguistic Inquiry* 24: 199–238.
- Aoun, J. and Y.-H. A. Li. 1993b. "On Some Differences Between Chinese And Japanese Wh-Elements". *Linguistic Inquiry* 24: 365–372.
- Asher, R.E. and T.C. Kumari.1997. *Malayalam*. Routledge: London And New York.
- Bachrach, A. and R. Katzir. 2008. "Right Node Raising And Delayed Spell-Out". In *Interphases: Phase-Theoretic Investigations of Linguistic Interfaces*. Ed. by Kleantes Grohmann. OUP. New York.
- Baker, M. 1988. *Incorporation: A Theory of Grammatical Function Changing*. University of Chicago Press: Chicago.
- Bayer, J. 2005. "Wh-in-situ, Case 77." In *The Blackwell Companion to Syntax* 5. Ed. by M. Everaert, H. Van Riemsdijk. Blackwell.
- Beck, S. 1996. "Quantified Structures as Barriers for LF-movement". *Natural Language Semantics* 4, 1-56.
- Beck, S. 2006. "Intervention Effects Follow From Focus Interpretation". *Natural Language Semantics* 14, 1-56.
- Beck, S. And S.-S. Kim. 1997. On Wh- And Operator Scope In Korean. *Journal Of East Asian Linguistics* 6, 339–384.
- Berman, S. 1991. *On The Semantics And Logical Form Of WH-Clauses*, PhD Dissertation: University Of Massachusetts At Amherst.

- Biberauer, T. 2005. *Splitting not spreading: A new perspective on the C/T connection*. Paper presented at GLOW in Asia: New Delhi.
- Boeckx, C. and K. K. Grohmann. 2007. "Putting Phases in Perspective". *Syntax* 10, 204–222.
- Boskovic, Z. 2002. "On Multiple Wh-Fronting". *Linguistic Inquiry* 33, 351–383.
- Brandner, E. 2000: "Scope Marking and Clausal Typing". In *Wh-Scope Marking*. Ed. by Uli Lutz, Gereon Müller, and Arnim Von Stechow. John Benjamins: Amsterdam.
- Brokehuis, H. 2013: *Feature Inheritance Versus Extended Projections*. Lingbuzz/001775.
- Cable, S. 2007. *The grammar of Q: Q-particles and the nature of Wh-fronting, as revealed by the Wh-questions of Tlingit*. PhD thesis: MIT.
- Cable, S. 2010. *The Grammar Of Q: Q-Particles, Wh-Movement, And Pied-Piping*. Oxford University Press: Oxford.
- Cable, S. 2012. "The optionality of movement and EPP in Dholuo". *Natural Language & Linguistic Theory*. Available at: <http://link.springer.com/article/10.1007/s11049-012-9172-6/fulltext.html>
- Cardinaletti, A. 2006. "Subjects and Wh-questions: Some New Generalizations." In *The Best Romance: Selected Papers from the 36th Linguistic Symposium on Romance Languages (LSRL)*. Ed. by J. Camacho et al. New Brunswick.
- Cheng, L. L.-S. 1991. *On the Typology of Wh-questions*. PhD Dissertation: MIT. published in Garland Publishing Inc., 1997.
- Cheng, L. L.-S. 2009. "Wh- In-Situ, From the 1980s to Now". *Language And Linguistics Compass* 3:3, 767-791.
- Cheng, L. and Huang, J. C-T. 1986. "Two Types of Donkey Sentences." *Natural Language Semantics* 4.2, 121-163.
- Cheng, L. L.-S. and J. Rooryck. 2000. "Licensing wh-in-situ". *Syntax* 3, 1–19.
- Cheng, L. L.-S. 2009. "Wh-in-situ, from the 1980s to Now". *Language and Linguistics Compass* 3/3, 767–791,
- Chomsky, N. 1986. *Barriers*. MIT Press: Cambridge, MA.

## References

- Chomsky, N. 1998. "Some Observations on Economy in Generative Grammar". In *Is the Best Good Enough? Optimality and Competition in Syntax*. Ed. by P. Barbosa et. al. MIT Press: Cambridge, MA.
- Chomsky, N. 2001. "Derivation By Phase". In *Ken Hale: A Life In Language*, Ed. by Michael Kenstowicz, 1-52. Cambridge, MA: MIT Press.
- Chung, D. and H-K Park. 1997. "NPIs Outside Of Negation Scope". In *Japanese/Korean Linguistics 6*. Ed. By Ho-Min Sohn And John Haig. 415–435. CSLI Publications: Stanford, Calif.
- Cinque, G. 1999. *Adverbs And Functional Heads. A Cross-Linguistic Perspective*. Oxford University Press: New York-Oxford.
- Cole, P., W. Harbert and G. Hermon. 1982. "Headless Relative Clauses In Quechua". *International Journal Of American Linguistics* 48: 2, 113-124
- Cole, P. and G. Hermon. 1998. "The Typology Of Wh-Movement: Wh- Questions In Malay". *Syntax* 1:3, 221-258.
- De Vos, M. and L. Vicente. 2005. "Coordination Under Right Node Raising". In WCCFL 24, Ed. by J. Alderete, C-H. Han, and A. Kochetov, 97–104. Cascadilla Proceedings Project : Somerville, MA.
- Dechaine R-M. and M. Wiltschko. 2002. "Decomposing Pronouns". *Linguistic Inquiry* 33:3, 409–442.
- Demirdache, H. 1997. "Condition C". In *Atomism and Binding*. Ed. by H. Bennis, P. Pica and J. Rooryck. Foris Publications: Dordrecht.
- Den Dikken, M. 2007. "Phase extension: Contours of a theory of the role of head movement in phrasal extraction". *Theoretical Linguistics* 33:1, 1-41.
- Diesing, M. 1992. *Indefiniteness*. MIT Press: Cambridge, MA.
- Duceschi, L. 2012. *Talking about this and that: Deictic pronouns in Dravidian and Indo-Aryan Languages*. Ph.D. thesis submitted at University of Verona.
- Elbourne, P. 2005. *Situations And Individuals*. MIT Press: Cambridge, MA.
- Fanselow, G. 2001. "Features,  $\Theta$ -roles, and free constituent order". *Linguistic Inquiry* 32, 405-437.
- Fanselow, G. 2007. "The Restricted Access of Information Structure to Syntax – A Minority Report". In: Féry, C., Fanselow, G. & Krifka, M. (2007). *The notions of information structure*. Working Papers of the SFB632, Interdisciplinary Studies on Information Structure (ISIS) 6.

## References

Potsdam: Universitätsverlag Potsdam.

- Fanselow, G. and Denisa Lenertová. 2011. "Left Peripheral Focus: Mismatches between Syntax and Information Structure". *Natural Language & Linguistic Theory* 29:1, 169-209.
- Frascarelli, M. and R. Hinterhölzl. 2004. "Types of Topics in German and Italian". At *Workshop on Information Structure and the Architecture of Grammar*: Univ. of Tübingen. February 2004.
- Fukui, N. 1993. "Parameters And Optionality". *Linguistic Inquiry* 24.3, 399-420
- Fukui, N. 2006. *A Review of Theoretical Comparative Syntax: Studies in Macroparameters*. Routledge: London and New York.
- Gallego, A. 2005. *Phase Sliding*, Ms. UAB/UMD.
- Gallego, Á. J. 2010: *Phase Theory*. John Benjamins: Amsterdam
- Gamut, L. T. F. 1991. *Logic, Language And Meaning*. University Press Of Chicago: Chicago
- Givon, T. 1983: *Topic Continuity In Discourse: A Quantitative Cross-Language Study*. John Benjamins: Amsterdam.
- Grewendorf, G. 2001. "Multiple *Wh*-Fronting". *Linguistic Inquiry* 32, 87–122.
- Grewendorf, G. 2005: "The Discourse Configurability of Scrambling". In *The Free Word Order Phenomenon: Its Syntactic Sources And Diversity*. Ed. by Sabel, J. and M. Saito. Mouton de Gruyter.
- Grewendorf, G. and J. Sabel. 1999. "Scrambling in German and Japanese: Adjunction versus Multiple Specifiers". *Natural Language and Linguistic Theory* 17, 1–65.
- Grimshaw, J. 2000. "Locality And Extended Projection". In *Lexical Specification And Insertion*, Ed. by Peter Coopmans, Martin Everaert and Jane Grimshaw. John Benjamins: Amsterdam.
- Gryllia, S. 2008. *On The Nature Of Preverbal Focus In Greek: A Theoretical And Experimental Approach*. Ph.D. Thesis Submitted at Universiteit Leiden. Available At : <https://Openaccess.Leidenuniv.nl/bitstream/1887/13437/3/Gryllia.Thesis.Pdf>
- Hagstrom, P. 1998. *Decomposing Questions*. Phd Dissertation. MIT
- Hale, K. 1983. "Warlpiri And The Grammar Of Non-Configurational Languages". *Natural Language & Linguistic Theory* 1, 3-47.
- Hamblin, C. L. 1973. "Questions In Montague English". *Foundations of Language* 10, 41-53.

## References

- Han, C-H., J. Lidz and J. Musolino. 2007. "V-Raising and Grammar Competition in Korean: Evidence from Negation and Quantifier Scope". *Linguistic Inquiry* 38, 1-47.
- Heck, F. 2004. *A theory of pied-piping*. Doctoral dissertation submitted at Universität Tübingen.
- Heim, I. 1982. *The Semantics of Definite and Indefinite Noun Phrases*. Ph.D. Thesis: University of Massachusetts.
- Hoji, H. 1985. *Logical Form Constraints And Configurational Structures In Japanese*. Doctoral Dissertation: University Of Washington.
- Holmberg, A. 2005. "Is There A Little Pro? Evidence From Finnish". *Linguistic Inquiry* 36, 533-564.
- Holmberg, A, and I. Roberts. 2013. "The syntax--morphology relation". *Lingua* 130, 111-131.
- Horvath, J., 1986. *FOCUS in the Theory of Grammar and the Syntax of Hungarian*. Foris: Dordrecht.
- Horvath, J. 2007. "Separating "Focus Movement" from Focus". In *Phrasal and Clausal Architecture*. Ed. by S. Karimi, V. Samiian and W. Wilkins. John Benjamins: Amsterdam.
- Horvath, J. 2010. "'Discourse features", Syntactic Displacement and the Status of Contrast". *Lingua*, 120:1346–1369
- Huang, C.-T. J. 1982. *Logical Relations in Chinese and the Theory of Grammar*. PhD dissertation: MIT.
- Huang, C-T. J. 2010. *Between Syntax and Semantics*. Routledge.
- Jayaseelan, K.A. 1989. *Parametric studies in Malayalam syntax*. Allied Publishers Limited: New Delhi, Mumbai.
- Jayaseelan K. A. 2001. "IP-Internal Topic And Focus Phrases". *Studia Linguistica* 55, 39–75.
- Jayaseelan, K.A. 2001b. "Questions And Question-Word Incorporating Quantifiers In Malayalam". *Syntax* 4, 63-93.
- Jayaseelan, K.A. 2003. "Question words in focus positions". *Linguistic Variation Yearbook* 3:1, 69-99.
- Jayaselan 2011: "Coordination and Finiteness in Dravidian". Invited Talk : Fisal at Universitat I Tromsø, June 09-10 2011.
- Josef, B. 2005. "Wh-In-Situ". In *The Blackwell Companion to Syntax*. Ed. by Martin Everaert And Henk C. Van Riemsdijk. Blackwell Publishers: Oxford.
- Kenesei, I. 1986. *Focus as Identification*. Available at: <http://www.nytud.hu/kenesei/publ/focus.pdf>

## References

- Kim, S-S. 2002. "Focus Matters: Two Types Of Intervention Effect". Paper Presented at WCCFL 21, Santa Cruz.
- Kishimoto, H.1992. "LF Pied Piping: Evidence From Sinhala". *Gengo Kenkyu* 102:46–87.
- Kishimoto, H. 2005. "Wh-In-Situ And Movement In Sinhala Questions". *Natural Language and Linguistic Theory* 23.1–51.
- Kíss, K. É. 1998. "Identificational Focus Versus Information Focus". *Language* 74, 245-27.
- Koizumi, M. 2000. "String Vacuous Overt Verb Raising". *Journal Of East Asian Linguistics*. 9: 227–285
- Kratzer, A. and J. Shimoyama. 2002. "Indeterminate Pronouns: The View From Japanese". Paper Presented at the *3rd Tokyo Conference On Psycholinguistics*. Available at [Http://Semanticsardrive.Net](http://Semanticsardrive.Net)
- Krifka, M. 2008. "Basic notions of information structure". *Acta Linguistica Hungarica*, 55.
- Kuroda, S.-Y. 1965. *Generative Grammatical Studies in the Japanese Language*. PhD dissertation. MIT. published in 1979, Garland Press, New York.
- Kuroda, S-Y. 1972. "The Categorical And The Thetic Judgment: Evidence From Japanese". *Foundations of Language* 9, 153-85
- Kuroda, S-Y. 2005. "Focusing on the matter of topic: a study of wa and ga in Japanese". *Journal of East Asian Linguistics* 14, 1–58.
- Larson, B. 2011. "A Dilemma With Accounts Of Right Node Raising". *Linguistic Inquiry* 43:1, 143-150.
- Lasnik, H. 1986. "On The Necessity Of The Binding Conditions". Reproduced in Lasnik (1989).
- Larson, R.K. 1988. "On The Double Object Construction". *Linguistic Inquiry* 19, 335–392.
- Lasnik, H. 1989. *Essays On Anaphora*. Kluwer Academic: Boston.
- Lee, F. 2003. "Anaphoric R-Expressions as Bound Variables". *Syntax* 6:84–114.
- Longobardi, G. 1994. "Reference and Proper Names: a Theory of N-Movement in Syntax and Logical Form". *Linguistic Inquiry* 25, 609–665.
- Madhavan, P. 1987. *Clefts And Pseudo-Clefts In English and Malayalam: A Study In Comparative Syntax*. Ph. D. Dissertation. CIEFL: Hyderabad.

## References

- Meinunger, A. 1995. "Case Configuration And Referentiality". In *Console II Proceedings*. Ed. by Eckardt, R. and V. Van Geenhoven.
- Menon, M. 2012. *The Apparent Lack Of Adjectival Category In Malayalam And Other Related Languages*. available at: [Http://Faculty.Human.Mie-U.Ac.Jp/~Glow\\_Mie/IX\\_Proceedings\\_Oral/10Menon.Pdf](http://Faculty.Human.Mie-U.Ac.Jp/~Glow_Mie/IX_Proceedings_Oral/10Menon.Pdf)
- Miyagawa, S. 2010. *Why Agree? Why Move: Unifying Agreement-Based and Discourse Configurational Languages*. MIT Press: Cambridge, MA.
- Mortensen, D. 2003. *Two Kinds Of Variable Elements In Hmong Anaphora*. Ms. UC Berkeley Available At: [Http://Www.Pitt.Edu/~Drm31/Papers/Two\\_Kinds\\_Of\\_Variable\\_Elements.Pdf](http://Www.Pitt.Edu/~Drm31/Papers/Two_Kinds_Of_Variable_Elements.Pdf)
- Muriungi, P. 2004. "Wh-Movement In Kitharaka As Focus Movement". *Pro- Ceedings Of The Conference On The Syntax, Semantics And Pragmatics Of Ques- Tions Held As Part Of 16th ESSLI*. Ed. By Ileana Comorovski And Manfred Kritka. ESSLI: University Of Nancy, France.
- Nakamura, N. 2002. "On Feature Movement". In *Dimensions Of Movement*. Ed. by Artemis Alexiadou, Elena Anagnostopoulou, Sjef Barbiers and Hans-Martin Gaetner. John Benjamins: Amsterdam.
- Nakao, C. 2004. "A Note on Japanese Anaphoric R-expressions". *Linguistic Research* 20, University of Tokyo, Tokyo: 207-214.
- Narahara, T. 1995. "Alternatives To Reflexives In Thai And Vietnamese: Bind- Ing Theory And Language Variations". In *Papers From The Third Annual Meeting Of The Southeast Asian Linguistics Society*. Ed. by Mark Alves. Arizona State University, Program For Southeast Asian Studies: Tempe, Arizona.
- Neeleman, A. and K. Szendroi. 2005. "Radical Pro Drop and the Morphology of Pronouns". *Linguistic Inquiry* 38, 671–714.
- Nishigauchi, T. 1986. *Quantification In Syntax*. Doctoral Dissertation, University Of Massachusetts: Amherst, Massachusetts.
- Pesetsky, D. 1987. "Wh-In Situ: Movement And Unselective Binding". In *The Representation Of(In)Definiteness*, Ed. by Reuland, E. and A. T. Meulen. MIT Press: Cambridge, MA.
- Pesetsky, D. 2000. *Phrasal Movement And Its Kin*. MIT Press: Cambridge, MA.

- Pesetsky, D. 2007. Property Delay (Remarks on “Phase Extension” by Marcel den Dikken)”. *Theoretical Linguistics* 33/1 : 105–120.
- Ramchand, G. 1997. “Questions, Polarity And Alternative Semantics”. In *Proceedings of NELS 27*. University Of Massachusetts At Amherst. 383–396
- Reinhart, T. 1993. “Wh-in-situ in the framework of the minimalist program”. Lecture at Utrecht Linguistic Colloquium. [Distributed by *OTS Working Papers in Linguistics* and printed with slight revisions in *Natural Language Semantics* 1997.]
- Richards, N. 2001. “A distinctness condition on Linearization”. In *Proceedings of the 20th West Coast Conference on Formal Linguistics*. Ed. by Karine Megerdooian and Leora Anne Bar-el. 470-483.
- Richards, N. 2001. *Movement In Language: Interactions And Architectures*. OUP. Oxford.
- Rizzi, L., 1997. “The Fine Structure Of The Left Periphery”. In *Elements Of Grammar*. Ed. By : Haegeman, L. Kluwer: Dordrecht.
- Rizzi, L. 2001. “On the position “Int (errogative)” in the left periphery of the clause”. *Current studies in Italian syntax*, 14, 267-296.
- Rizzi, L., 2007. “On Some Properties Of Criterial Freezing”. In *CISCL Working Papers* Vol. 1. Ed. By : Moscati, V. University Of Siena.
- Rizzi, L. 2013. “Topic, Focus, and the Cartography of the Left Periphery”. In *The Bloomsbury Companion to Syntax*. Ed. by Luraghi and Parodi. Bloomsbury: London/New York.
- Roberts, I. 2011. "Head movement and the Minimalist Program." *Oxford Handbook of Minimalism*. OUP. Oxford.
- Rooth, M. 1992. “A Theory Of Focus Interpretation”. *Natural Language Semantics* 1, 75-116.
- Rooth, M. 1996. “Focus”. In *The Handbook Of Contemporary Semantic Theory*. Ed. by Lappin, S. Blackwell: Oxford.
- Ross, J.R. 1967. *Constraints on Variables in Syntax*. Ph.D. Thesis, MIT.
- Sabel, J. 2000. “Partial Wh-Movement And The Typology Of Wh-Questions.” In *Wh-Scope Marking*. Ed. by Uli Lutz, Gereon Muier and Von Stechow. John Benjamins: Amsterdam.
- Sabel, J. 2002. “Wh-Questions and Extraction Asymmetries in Malagasy.” In *Proceedings Of The 8th Conference Of The Austronesian Formal Linguistics Association (AFLA VIII)*. Ed. by A.



## References

- Rackowski and N. Richards. MIT Working Papers In Linguistics 44. MITWPL: Cambridge, MA
- Sabel, J. 2003. "Malagasy As An Optional Wh-Fronting Language." In *Multiple Wh-Fronting*. Ed. by Cedric Boeckx and Kleantes K. Grohmann.
- Sabel, J. and M. Saito. 2005: *The Free Word Order Phenomenon: Its Syntactic Sources and Diversity*. Mouton de Gruyter.
- Saito, M. 1989. "Scrambling as semantically vacuous A'-movement". In *Alternative Conceptions of Phrase Structure*. Ed. By M. Baltin and A. Kroch. University of Chicago Press: Chicago.
- Sasse, H-J. 1987. "Thethetic-categorical distinction revisited". *Linguistics* 25, 511-580.
- Shimoyama, J. 2006. "Indeterminate Phrase Quantification In Japanese". In *Natural Language Semantics* 14: 2, 139-173.
- Simpson, A. and Z. Wu. 2002. "Agreement, Shells And Focus". *Language* 78: 2, 287-313.
- Szabolcsi, A. 1981. "The Semantics Of Topic-Focus Articulation". *Formal Methods in the Study of Language*. Ed. by Groenendijk, Janssen, and Stokhof. Mathematisch Centrum: Amsterdam.
- Takahashi, D. 1997. "Move F and Null Operator Movement". *Linguistic Review* 14, 181-196.
- Tirumalesh, K.V.1996. "Topic and Focus in Kannada: Implications for Word Order. *South Asian Language Review* 6, 25-48.
- Tsai, W.-T. D. 1994. *On Economizing The Theory Of A'-Dependencies*. Doctoral Dissertation, MIT. Distributed By The MIT Working Papers In Linguistics.
- Tsai, W-T. D. 2008. "Left periphery and *how-why* alternations". *Journal of East Asian Linguistics* 17, 83-115.
- Watanabe, A. 1992. "Subjacency and S-Structure Movement of WH-In-Situ". *Journal of East Asian Linguistics* 1, 255-291.
- Wexler, K. and P. Culicover. 1980. *Formal Principles of Language Acquisition*. MIT Press: Cambridge, MA.